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ABSTRACT

The book presents a comprehensive resource guide to habilitative techniques, aids, and equipment for cerebral palsied persons of all ages. The guide is divided into seven sections, which cover the following areas: an introduction (which deals with general concerns, such as established treatment techniques and attitudinal concerns): positioning and seating: feeding: dressing: hygiene (including dental care, bathing, and toileting): household and community involvement (including meal preparation, shopping and other community skills, sexuality, transportation, and recreation): and general resources (which lists addresses of frequently mentioned suppliers and publishers, along with some of their offerings). Each section, with the exception of the one on general resources, includes preliminary text to help the reader in selecting appropriate resources, which are then listed and briefly described. Line drawings of all equipment are also provided. (DLS)

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A RESOURCE GUIDE TO HABILITATIVE TECHNIQUES AND AIDS FOR CEREBRAL PALSIED PERSONS OF ALL AGES

By

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1978

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PREFACE

A survey over a six-state area (Region III under the Developmental Disabilities Council of HEW) conducted by the Job Development Laboratory of The George Washington University Medical Center revealed that one of the most pressing needs for both child and adult cerebral palsied persons was information as to where aids, equipment and guidance on techniques for programs could be obtained. In response to this we decided to put together a small pamphlet listing major suppliers and a few pertinent books. However, as time went on and more and more inquiries were received about specific problem areas, the pamphlet grew into a guide book.

We have tried to include as many of the little known aids as possible and have touched only lightly on the well known, directing the reader to appropriate suppliers and books. We are aware that some excellent resources have probably been left out that we are not familiar with, but ideally, with the leads given, the reader will eventually find solutions for many of the problems encountered in attempting to improve the functioning of the cerebral palsied person.

It is hoped that this manual will be useful to professionals, parents, and other persons involved with the care and habilitation of cerebral palsied persons as well as friends and other interested persons as a guide to what is available. Although this book was written with the cerebral palsied person in mind, many of the aids could be used by persons with other disabilities.

As this book is intended to be a guide to all existing techniques and aids presently available, the author has tried not to endorse the use of any particular school of treatment techniques. It is up to the reader to choose which is the most appropriate aid. However, caution is advised in the use of those resources regarding specific treatment techniques. The program for each cerebral palsied person must be planned and guided by trained professionals on an individual basis according to the needs of each case. There can be no "recipe book" to follow step-by-step. We hope this guide will become a well used reference book.

HOW TO USE THE GUIDE

The book is divided into seven sections. Each section, except for the last (Section G), begins with some preliminary text to help the reader in selecting appropriate resources. However, not all the references are cited in the text, so the reader should look at other references listed in the end of each section.

Each subject area has been given a letter. Each reference has been given a number preceded by the appropriate letter (e.g., Nancie Finnie's book, Handling the Young Cerebral Palsied Child at Home has been given the code A15. This means that it is the 15th reference listed in the section under treatment techniques.) If a reference has information useful under another subject area it will be listed by author and title only in that section as well as retaining its original code. This is the case with

A15 which has useful information on several other areas. A brief description of the references as well as other pertinent information, such as where it can be procured, is given the first time that it is mentioned.

Addresses of frequently mentioned suppliers and publishers are listed in Section G - General Resources. Note also that a brief list of some of the things carried by each supplier is listed under the name and address.

• KEY

To help the reader find articles and books that would be the most useful, a key for appropriate users has been devised. The key is as follows:

M - These references generally contain technical material that would be most useful to persons with a medical background including physicians, occupational therapists, physical therapists, speech therapists and nurses.

NM - References with this user designation generally contain information that would be useful to non-medical professionals including social workers, recreation therapists, certified occupational therapy aids, vocational counselors, teachers, psychologists, clergymen, lawyers and other professionals who wish to serve and/or counsel the cerebral palsied person.

C - References with this designation are appropriate for the consumer--parents, siblings, other relatives, friends; other persons who may be involved with the care of cerebral palsied persons such as institution direct care staff, aides and group home parents, and cerebral palsied persons themselves.

Some references may have material that we feel would be useful to all these groups and have been so designated. This key has been devised only as an added guide to finding references with the hope that it will make the book more useful.

ACKNOWLEDGMENTS

A resource guide such as this turned out to be is not put together by one person alone. The information has been collected over the years from different sources, many of whom have been forgotten as the techniques become incorporated into my own practice. I would, however, like to give credit and sincere thanks to those who helped directly with the production of this book.

I would like to thank Mrs. Elizabeth Schoenfeld, Director of the Region III Developmental Disabilities Office, Office of Human Development Services, for her encouragement and support of the "Technical Support Services to the Developmentally Disabled, Region III" grant under which this project was undertaken.

I would also like to thank Evelyn Ingram, O.T.R. who did a literature search during the beginning stages of this study. She was aided by Christine Nelson, Ph.D., O.T.R. of the Children's Guild, Inc., Baltimore, Maryland, who generously shared her wide knowledge, limited time and extensive library. Many of the resources listed came from her. Ms. Candyce Goschy, O.T.R., of the D.C. Society for Crippled Children, and Janet Sheridan, O.T.R., Public Information Person, and Mary Young, Director of Education of the American Occupational Therapy Association, also assisted Evelyn in her search for information.

The help of Shirley McCallum, R.D. of the Georgetown University, University Affiliated Program for Child Development, is also appreciated. She shared many of her resources on nutrition. Laura Vogtle, O.T.R., of Children's Rehabilitation Center in Charlottesville, Virginia generously gave permission for me to use drawings of equipment presented at conferences on cerebral palsy held at CRC.

Special recognition is due Jean Hannah, O.T.R. of Mt. Vernon Hospital, Alexandria, Virginia, who served as technical editor, giving some very valuable suggestions and leads for information that should be included, and Gayle Steinberg of Wordwork, Gaithersburg, Maryland, who served as finishing editor, putting the information in a usable format and correcting my numerous grammatical mistakes. Mention should be made of the typists who have assisted in the various stages of this book--Judy Carter, Joan Collins, and the final typist, Rose Meeke.

The help of Ruth Ansell is also appreciated for her excellent line drawings, which, we hope, make this guide clearer and more useful.

Lastly, I would like to thank the staff of the Job Development Lab at George Washington University for their advice, guidance and encouragement--Kalisankar Mallik, M.S., Director; Elaine Shaver, C.R.C., Coordinator of the "Technical Support Services to the Developmentally Disabled, Region III" grant; Sheldon Yuspeh, M.S., Vocational Coordinator; and James L. Mueller, B.I.D., who guided me on general format and presentation of the book and is responsible for the creative cover.

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A. INTRODUCTION

The physically involved developmentally disabled child (i.e., cerebral palsied child) is first and foremost a child and should be treated as much like any other child as possible. This child should be disciplined and loved when the needs arise. Within his capabilities he should be expected to take the responsibility of some household chores just as other members of the family--for example, wiping off his own eating area after meals. Reared with the expectation that he will one day be a contributing member of society, he can develop a sense of responsibility at an early age and build on it as he grows older. All his upbringing at home and education and therapy should be with this aim. The parents, teachers and other persons working with him should be on the lookout for skills that may someday be useful to him vocationally and as an independent citizen. Then when he becomes an adult, he will have acquired the good work habits necessary to employment (A58).

Likewise, when the child becomes an adult chronologically, he should be treated as much like any other adult as possible. He should dress as an adult and be included in adult conversations. Special techniques, aids, devices and equipment are useful to supplement his abilities and to attempt to compensate for deficits. The ultimate aim is to make it possible for cerebral palsied persons to function as fully as possible in the adult world.

- ESTABLISHED TREATMENT TECHNIQUES

Before an effective treatment program is outlined, a guide to screening developmental problems (A29) (A30) (A32) (A33) will be useful in identifying deficits. Then a specific evaluation should follow and remediation can be planned.

Many different techniques for the treatment of cerebral palsy and other physical impairments of developmentally disabled persons have been developed over the years. Although some persons use exclusively one technique, many professionals use a combination of techniques. For clear, brief descriptions of these various techniques, read Systems of Therapy in Cerebral Palsy by Harriet E. Gillette, M.D. (A18); Cerebral Palsy by William Cruikshank (A14); or Physical Therapy Services in the Developmental Disabilities (A22). Other literature on specific techniques is listed at the end of this chapter.

In addition to the techniques of Rood, Bobath, Phelps, Crothers, Deaver, Fay-Doman, Brunnstrom, and Proprioceptive Neuromuscular Facilitation, described in these books, many therapists have incorporated the techniques of Dr. Jean Ayres (A1) (A3). Dr. Ayres' techniques of sensorimotor integration were originally developed for use with minimally brain damaged or learning disabled children, but have proven to be very useful in the

treatment of the more severely, neurologically impaired individuals (A2) (A4). We agree with the belief that a good combination seems to be early intervention starting with facilitation and multisensory stimulation techniques in conjunction with developmentally appropriate functional training (A11). As the child gets older progressively higher level function is encouraged following developmental stages.

A must for any parent of, or person working with, cerebral palsied persons is Nancie Finnie's book Handling the Young C.P. Child at Home (A15). This book presents techniques for all aspects of the handling, feeding and other activities of daily living as well as many suggestions for aids and equipment. It is clearly illustrated to assist the reader in carrying out its suggestions. Although this book is aimed at the handling of the young child, many of its suggestions are useful with the older child and adult.

Other useful handbooks include Jane Blumenfeld's well illustrated Help Them Grow (A37) which gives hints on self-help and social interaction and stresses the consideration of the entire family's needs as well as those of the handicapped child; Developmental Programming for Infants and Young Children (A33), a set of three volumes designed to be used by parents and therapists together; and Occupational Therapy for Mentally Retarded Children (A12) containing an orientation to occupational therapy and mental retardation as well as techniques for handling and training the retarded child in activities of daily living.

It must be noted that a firm knowledge of normal development, as presented in a good book on child development, is a prerequisite for understanding the basis of any of the approaches. In this way the handler will know what to expect next in the child's development and will not expect a child to perform a task for which he is not developmentally ready. The most complete guide to development is White's First Three Years of Life (A35). Other sources are listed in the bibliography.

The use of aids and devices can be introduced as the need arises to better facilitate the development of specific functions. A wide range of theories exist as to when, if ever, it is appropriate to introduce the use of bracing, splinting, restraining and other supportive and/or assistive methods. Again we must caution the parent and other direct care personnel to rely on the direction of professionals in the choice of techniques and aids.

- ATTITUDINAL CONCERNS AND ADVICE TO PARENTS

For the new parent of a handicapped child Closer Look, The National Information Center for the Handicapped (A39) puts out a 20-page booklet called Practical Advice to Parents, a very basic parent-to-parent discussion of how to handle the problems that arise with schools, finances, attitudes and resources funding. Another excellent help to the new parent is the "Letter to the Parent of a Cerebral Palsied Child" by Mary Huber, Ph.D. (A45). Although written by a speech therapist, it touches on subjects other than language, emphsizing the building of experiences and skills to help the child develop to the fullest. These two publications also would be well

placed in the waiting room of a developmental clinic or pediatrician's office.

One of the best books that we have found to help the family adjust to the emotional strains of bringing up a handicapped child is A Handicapped Child in the Family, A Guide for Parents, by Verda Heisler, Ph.D. (A43). Dr. Heisler has a very practical approach which she describes with examples from group therapy held with parents of cerebral palsied children. Another such book is Understanding Those Feelings by Eugene McDonald (A50).

The late Dr. Matthew Dubuskey's introduction to his book, The Chronically Ill Child and His Family (A41) emphasizes the thinking of the child and his environment as a whole--including the physical, emotional, intellectual and socioeconomic aspects that affect the child, his parents and siblings. The United Cerebral Palsy Association publishes two booklets entitled Tomorrow is Today (A60) and Skills in Living, Toward a Richer Tomorrow (A59). The National Association for Retarded Citizens has available a pamphlet called How to Provide for Their Future (A62) which offers information on Medicaid, Medicare and Social Security Benefits. These three publications, perhaps available through your local library, should help the handicapped person and his parents to plan for the future. Parents might also subscribe to newsstand magazines such as Parents' Magazine and Redbook (A53) for ideas on child rearing.

Parents should check out the local resources for what assistance is available to them in emergencies. Communities may have a babysitting agency for handicapped children and adults. Some residential institutions offer respite (occasional relief) care for a weekend or several weeks in emergencies should the parents be ill or just need a vacation. The local chapters of United Cerebral Palsy (UCP), National Association for Retarded Citizens (NARC), Homemaker Health Aide Services (F5), County Information Service, Visiting Nurses Association, or local libraries can give information as to what is available.

A number of autobiographies written by cerebral palsied persons give insight into how severely disabled persons feel about themselves and the world around them (A38) (A40) (A51). Also, the film entitled "I Am Not What You See" (A56) might be useful to start off discussion in a parent group.

The area of play and recreation should not be ignored when talking about techniques and approaches to rearing the cerebral palsied person. As pointed out in our training manual Developing Pre-Vocational/Vocational Skills in Developmentally Disabled Persons (A61), basic work habits and social skills as well as gross motor coordination can be developed through recreation. Books and magazines aimed toward the normal child can give good ideas that are adaptable to the physically handicapped child (A42) (A49). Various toys and games on the market that use Velcro and magnets make it easier for the poorly coordinated child or adult to participate in games with others. Toys that give tactile (touch), auditory (sound) and olfactory (smell) stimulation help the child learn and are especially useful if there is any visual impairment. Refer to the comments on recreation in the community in Section F for further information in this area.

One last point--remember the cerebral palsied child is first of all a child, then a cerebral palsied person. As he grows, this child will go through most of the same stages as the normal child, praticularly in the adolescent years. His fight for independence is made only more difficult by his physical dependence.

A. REFERENCES -- INTRODUCTION

- TREATMENT

A.1 Ayres, A. Jean. "Interrelationships Among Perceptual-Motor Functions in Children." American Journal of Occupational Therapy 20:2 (1966) pp. 68-71.

A study investigating interrelationships among different dimensions of perceptual-motor function by subjecting correlations of scores on tests to factor analysis.

USERS: M

A.2 Ayres, A. Jean. Perceptual-Motor Dysfunction in Children. 1964, 30 pp. Spiral binding, paperback

COST: $2.00; $1.50 for 10 or more copies
(payment should accompany orders)

Available through: The Greater Cincinnati District
Ohio Occupational Therapy Association
1539 Shenandoah Avenue
Cincinnati, Ohio 45237

Lecture material presented at the 1964 annual conference of the Ohio Occupational Therapy Association, defining perceptual-motor dysfunction, the relationship between environment and development, the theoretical approach to treatment of dysfunction, and five patterns of dysfunction, their neurophysiological mechanisms and ontogenetic process.

USERS: M

A.3 Ayres, A. Jean, M.A., O.T.R. "Proprioceptive Facilitation Elicited Through The Upper Extremities: Part II, Application." American Journal of Occupational Therapy 9:2 (1955), Part I.

A discussion of proprioceptive facilitation techniques.

USERS: M

A.4 Ayres, A. Jean. Sensory Integration and Learning Disorders. Western Psychological Services, 1973, 294 pp.

COST: $15.50

Developmental neurology and its relationship to learning ability. Text for sensory integration techniques developed by Dr. Ayres.

USERS: M, NM

A.5 Ayres, A. Jean, Ph.D. Southern California Sensory Integration Tests. Western Psychological Services, 1972.

A battery of tests for space visualization, figure-ground perception, kinesthesia, tactile perception, motor accuracy and design copying. To be administered only by persons qualified in the administration of these tests.

USERS: M

A.6 Bobath, Berta. Abnormal Postural Reflex Activity Caused by Brain Lesions. London: Heinemann, Second Edition, 1975. Illus.

COST: $5.00

Available through: William Heinemann Medical Books, Ltd.
23 Bedford Square
London WC1B3HT

USERS: M

A.7 Bobath, Berta and Karel Bobath. Motor Development in the Different Types of Cerebral Palsy. London: William Heinemann Medical Books, Ltd., 1977.
Paperback

COST: $5.00

Available through: William Heinemann Medical Books, Ltd.
23 Bedford Square
London WC1B3HT

USERS: M, NM

A.8 Bobath, Berta, F.C.S.P., S.A.A.O.T. "Motor Development, Its Effect on General Development, and Application to the Treatment of Cerebral Palsy." Physiotherapy (November 1971).

Explains the basis for neuro-developmental treatment (NDT) techniques
USERS: M

A.9 Bobath, Berta, F.C.S.P. "A Neuro-Developmental Treatment of Cerebral Palsy." Physiotherapy (August 1963).

Description of NDT using one child as an illustration. Includes chart of motor patterns.

USERS: M

A.10 Capon, Jack. Perceptual-Motor Lesson Plans, Basic and "Practical" Lesson Plans for Perceptual-Motor Programs in Preschool and Elementary Grades. Alameda, California: Front Row Experience, Third Edition, 1975. Illus.

COST: $4.75--paperback manual
$9.75--set of same lesson plans on 5½" x 8½" cards for classroom use.

Available through: Front Row Expereince
564 Central Avenue, Suite 213
Alameda, California 94501

Well illustrated practical activities. Book has section on construction of equipment.

USERS: M, NM

A.11 Carlsen, Pat Nuse, O.T.R. "Comparison of Two O.T. Approaches for Treatment of the Young Cerebral Palsied Child." American Journal of Occupational Therapy 29:5 (May-June 1945), pp. 267-272.

A comparison of facilitation and functional treatment approaches. (Results showed that young children participating in programs as defined by the Bobaths, Rood and Ayres showed greater gains than those in programs involving only adaptive hand and self-help activities.)

USERS: M

A.12 Copeland, Mildred; Ford, Lana; and Nancy Solon. Occupational Therapy for Mentally Retarded Children: Guidelines for Occupational Therapists, Aides and Certified Occupational Therapy Assistants. University Park Press, 1976, 224 pp. Illus.

COST: $13.75

A guide to occupational therapy practice in the field of mental retardation, including handling, activities of daily living and recreation. Designed for the use of Certified Occupational Therapy Assistants, but useful to parents and other direct care staff.

USERS: M, NM, C

A.13 Crothers, B., and R. Paine. The Natural History of Cerebral Palsy. Cambridge, Massachusetts: Harvard University Press, 1959.

USERS: M, NM

A.14 Cruikshank, William M., ed. Cerebral Palsy--A Developmental Disability. Syracuse, New York: Syracuse University Press, 1976, 586 pp.

A presentation of all considerations in the diagnosis and treatment of cerebral palsy by a group of authorities in their respective fields. Areas covered are medical aspects, intelligence, personality and behavior, communication, hearing, vision, dental problems, physical therapy, occupational therapy, education, and family, social and vocational life. Not a guide to treatment.

USERS: M, NM, C

A.15 Finnie, Nancie R., F.C.S.P. Handling the Young Cerebral Palsied Child at Home. New York: Dutton, Second Edition, 1975, 330 pp. (U.S. editor--Una Haynes, R.N., B.S., M.P.H.) Paperback

COST: $4.95

The best guide to handling and treatment of cerebral palsy yet published. Presents a neuro-developmental approach and includes all aspects of treatment. Excellent drawings demonstrating handling techniques, positioning, equipment, and activities.

USERS: M, NM, C

A.16 Fiorentino, Mary R., Mus.B., O.T.R. Reflex Testing Methods for Evaluating Central Nervous System Development. Springfield, Illinois: Charles C. Thomas, Second Edition, 1976, 52 pp.

COST: $8.50

A well illustrated, clearly presented guide to reflex testing.

USERS: M

A.17 Folsom, Geneva S., Ed.D.; Federici, Jean; and Myra Feldman. Life Skills for the Developmentally Disabled, An Approach to Accountability in De-institutionalization, Vol. III, 1975, 112 pp.

COST: $2.50

Available through: ERIC
Document Reproduction Service
P.O. Box 190
Arlington, Virginia 22210

The last volume of a package developed for use in training direct care staff in institutions for the mentally retarded. Designed to be used in conjunction with the Adaptive Behavior Scale put out by AAMD.

USERS: M, NM, C

A.18 Gillette, Harriet E., M.D. Systems of Therapy in Cerebral Palsy. (American Lectures in Cerebral Palsy Series). Springfield, Illinois: Charles C. Thomas, 1974.

COST: $6.50

Excellent brief review of the principal theories and procedures involved in the treatment of motor disability in children with cerebral palsy. Includes Crothers, Phelps, Deaver, Fay-Doman, Brumstrom, Bobath, P.N.F., and Rood.

USERS: M, NM, C

A.19 Kabat, H. Proprioceptive Facilitation in Therapeutic Exercise. New Haven: Phy. Med. Library III, 1961. Sidney Licht, M.D., ed.

USERS: M

A.20 Knott, M., and Dorothy Voss. PNF Patterns and Techniques. New York: Hoeber, 1963.

A presentation of the methods of proprioceptive neuromuscular facilitation.

USERS: M

A.21 MacDonald, Elizabeth M., et al. Occupational Therapy in Rehabilitation. Baltimore: Williams and Wilkins, Fourth Edition, 1976, 469 pp. Illus.

COST: $18.95

Available through: Williams & Wilkins
428 E. Preston St.
Baltimore, Maryland 21202

An overall coverage of current treatment techniques for the rehabilitation of persons with drug addiction, cerebral palsy, psychosomatic disorders and geriatric complications.

USERS: M

A.22 Pearson, Paul H., M.D., M.P.H., and Carol Ethun Williams, R.P.T., eds. Physical Therapy Services in the Developmental Disabilities. Springfield, Illinois: Charles C. Thomas, 1976.

COST: $18.75

A comprehensive guide to different treatment methods for cerebral palsy. Contributing editors are Berta and Karel Bobath, Bryant J. Cratty, Nancy M. Fieber, Diane Kliewer, Helen A. Mueller, Shirley A. Stockmeyer, E. Jack Trenbath, and Dorothy E. Voss.

USERS: M

A.23 Rood, Margaret S., O.T.R., R.P.T. "Neurophysiological Mechanisms Utilized in the Treatment of Neuromuscular Dysfunction." American Journal of Occupational Therapy 10:4 (1956), pp. 220-225.

An explanation of Ms. Rood's facilitation techniques of stroking, icing and deep pressure.

USERS: M

A.24 Trombly, Catherine Ann, O.T.R., and Anna Deanne Scott, O.T.R. Occupational Therapy for Physical Dysfunction. Baltimore: Williams and Wilkins, 1977. Illus.

COST: $22.50
Available through: The Williams & Wilkins Co.
P.O. Box 1496
Baltimore, Maryland 21203

Contains a section on treatment for cerebral palsy. Excellent guide for occupational therapists. Well illustrated.

USERS: M

A.25 White, Carol Sue; Minor, Jane Wilson; and Barbara Connolly, eds. A Comprehensive Handbook for Management of Children with Developmental Disabilities. 1977, 231 pp.

COST: $4.00
Available through: Child Development Center
University of Tennessee Center for the Health Sciences
711 Jefferson
Memphis, Tennessee 38105

A non-technical guide to management of developmentally disabled children. Should be used under the guidance of therapists.

USERS: NM, C

- TREATMENT--AUDIO-VISUAL MATERIALS

A.26 American Occupational Therapy Association. "First Things First, Occupational Therapy and the Developing Child." 16 mm color film, 15 min. (1974).

COST: $15.00--Rental $105.00--Purchase ORDER#: B3
$ 8.00-- Video Rental $ 35.00-- Video Purchase

Available through: Distribution Center
American Occupational Therapy Association
6000 Executive Blvd.
Rockville, Maryland 20852

A documentary on the role of the occupational therapist working with children who have developmental disabilities. Filmed in home, school and clinic settings.

USERS: M, NM, C

- NORMAL DEVELOPMENT

A.27 Brazelton, T. Berry, M.D. Infants and Mothers, Differences in Development. New York: Dell, 1969.

COST: $5.95 Paperback; $12.95 Hardback (Delacorte)

Available through: Dell Publishing Co.
1 Dag Hammarskjold Plaza
245 East 47th Street
New York, New York 10017

USERS: M, NM, C

A.28 Brazelton, T. Berry, M.D. Toddlers and Parents. New York: Delacorte, 1974.

COST: Approx. $5.95 Paperback; $12.95 Hardback

Available through: Delacorte Press
1 Dag Hammarskjold Plaza
245 East 47th Street
New York, New York 10017

Explains characteristic behaviors between parents and children. Emphasizes developing communication.

USERS: M, NM, C

A.29 Bayley Scales of Infant Development Ages 2-30 months, 1969.
The Psychological Corporation
304 East 45th Street
New York, New York 10017

COST: $88.00 per set of testing materials including manual and 25 record booklets;
$ 3.00 for 25 record booklets.

Scores mental, motor and behavior skills individually.

USERS: M, NM

A.30 Denver Developmental Screening Test Ages 2 weeks-6 years, 1968-70.
Ladoca Project and Publishing Foundation, Inc.
East 51st Avenue & Lincoln Street
Denver, Colorado 80216

COST: $6.25 per kit; $1.00 per manual; $1.00 per 100 tests

A very simple, short, individual screening tool for gross motor, fine motor, adaptive, language and personal-social skills.

USERS: M, NM

A.31 Illingsworth, R.S. The Development of the Infant and Young Child. Baltimore: Williams and Wilkins Co., Sixth Edition, 1976. Hardcover

COST: $14.50

Basic text of normal development.

USERS: M, NM, C

A.32 Krajicek, Marilyn J., R.N., M.S. and Alice I. Tearney, R.N., M.S., eds. Detection of Developmental Problems in Children, A Reference Guide for Community Nurses and Other Health Care Professionals. J.F.K. Developmental Center, University of Colorado Medical Center, University Park Press, 1976, 198 pp.

COST: $6.95

A screening guide for developmental problems in infants and children: physical, visual, genetic, aural, speech and language, nutritional, and behavioral.

USERS: M

A.33 Schafer, D. Sue, and Martha S. Moersch, eds. Developmental Programming for Infants and Young Children. Ann Arbor, Michigan: University of Michigan Press, 1977.
VOL. 1 - Assessment and Application
VOL. 2 - Early Intervention Developmental Profile
VOL. 3 - Stimulation Activities

COST: $14.50, one 3-volume set, spiral-bound paperback

Available through: University of Michigan Press
615 East University
Ann Arbor, Michigan 48106

Gives activities to deal with specific problems in the areas of perceptual-fine motor coordination, cognition, language, social-emotional development, self-care, gross motor coordination. Features a developmental approach and special recommendation for the hearing-impaired, motor-impaired and visually-impaired. Covers children developmentally from 0 to 36 months.

USERS: M, NM, C

A.34 Sheridan, Mary D. Children's Developmental Progress from Birth to Five Years; the Stycar Sequences. Atlantic Highlands, New Jersey: Humanities Press, 1973, 74 pp. Illus. Paperback

COST: $4.50
Available through: Humanities Press, Inc.
Hillary House - Fernhill House
Atlantic Highlands, New Jersey 07716

Contains major topics in magazines for increased ease in understanding reference and application. Includes clearly understood definitions and illustrated charts. Reference list and addresses for tests, lectures, films.

USERS: M, NM, C

A.35 White, Burton. The First Three Years of Life. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1975.

COST: $10.00

Complete guide to normal development including auditory, visual, tactile and motor systems.

USERS: M, NM, C

• GUIDES FOR PARENTS AND STORIES ABOUT AND BY CEREBRAL PALSIED PERSONS

A.36 Ayrault, Evelyn West. Helping the Handicapped Teenager Mature. 1974, 27 pp.
Booklet

COST: $ 0.50 Booklet No. 504

Available through: Public Affairs Pamphlets
381 Park Avenue South
New York, New York 10016

USERS: NM, C

A.37 Blumenfeld, Jane; Thompson, Pearl E.; and Beverly S. Vogel. Help Them Grow: A Pictorial Handbook for Parents of Handicapped Children. Nashville, Tennessee: Abingdon Press, 1971.
Paperback

COST: $2.75
Available through: Abingdon Press
201 Eighth Avenue, South
Nashville, Tennessee 37202
(615) 749-6347

A clear, simple guide to rearing the handicapped child. Includes family, community and social concerns as well as activities of daily living.

USERS: NM, C

A.38 Brown, Christopher. My Left Foot.

Autobiography of a severely disabled cerebral palsied man in Ireland. A very warm story of family life.

USERS: M, NM, C

A.39 Closer Look, eds. Practical Advice to Parents: A Guide to Finding Help for Handicapped Children and Youth. Washington, D.C.: The National Information Center for the Handicapped, Second printing, 1976. 20 pp.
Booklet

Available through: National Information Center for the Handicapped
P.O. Box 1492
Washington, D.C. 20013

Parent-to-parent discussion. What to do when you suspect something is wrong, trouble in school, selecting a school program, effecting change in social action, financial aid, finding resources, parent groups, attitudes, job information.

USERS: C

A.40 Deacon, Joseph John. Joey. Scribner, 1974, 99 pp.

COST: $4.95

Autobiography of a severely disabled cerebral palsied man. Shows changes in habilitation attitudes and practices over 60 years in England. A very warm book.

USERS: M, NM, C

A.41 Debuskey, Matthew, M.D. The Chronically Ill Child and His Family. Springfield, Illinois: Charles C. Thomas, 1970. Illus.

COST: $11.50

Emphasis on thinking of the child and his environment as a whole including physical, emotional, intellectual and socioeconomic aspects that affect the child, his parent and siblings. Besides Dr. Debuskey's first chapter on all ill children, there is one chapter specifically on the orthopedic appraoch to cerebral palsy by Dr. Robert C. Abrams.

USERS: M, NM, C

A.42 Gordon, Ira J. Baby Learning Through Baby Play, A Parents' Guide for the First Two Years. New York: St. Martin's Press, 1970, 121 pp. Illus.
Paperback

COST: $3.95
Available through: St. Martin's Press
175 Fifth Avenue
New York, New York 10010

Games and activities geared to the normal child that could also be used with a disabled child. Intended to develop basic skills, learning, enjoyment, and self-confidence. Easily read and understood.

USERS: M, NM, C

A.43 Heisler, Verda, Ph.D. A Handicapped Child in the Family: A Guide for Parents. New York: Grune & Stratten, Inc. 1972, 176 pp.

COST: $12.50
Available through: Grune & Stratten, Inc.
11 Fifth Avenue
New York, New York 10003

A practical approach through group therapy to the emotional problems associated with having a handicapped child. Uses examples of problems and solutions dealt with through a group of parents and cerebral palsied children. An excellent book.

USERS: M, NM, C

A.44 Henscheid, Henry. View of Life. 1975, 16 pp.

COST: $ 0.25 PUBN. No. YES-6

Available through: National Easter Seal Society for Crippled Children and Adults, Inc.

An inspirational booklet based on the personal experiences and philosophy of a young adult who has cerebral palsy, for handicapped persons of all ages.

USERS: M, NM, C

A.45 Huber, Mary, Ph.D. Letter to the Parent of a Cerebral Palsied Child. An Easter Seal Publication, 3 pp.

COST: Free
Available through: National Easter Seal Society for Crippled Children and Adults, Inc.

A compassionate letter to a parent who has recently discovered her child has cerebral palsy. Excellent basic information, covering all aspects of treatment.

USERS: NM, C

A.46 Killilea, Maria. Karen. Englewood Cliffs, New Jersey: Prentice-Hall, 1952, 314 pp.

COST: $6.40
Available through: Prentice-Hall, Inc.
Englewood Cliffs, New Jersey 07632

Paperback--
COST: $1.50
Available through: Dell Publishing Co.
750 Third Avenue
New York, New York 10017

A poignant but happy story told by the mother of a little cerebral palsied girl.

USERS: M, NM, C

A.47 Killilea, Maria. With Love From Karen. Englewood Cliffs, New Jersey: Prentice-Hall, 1963, 371 pp.

COST: $5.95
Available through: Prentice-Hall, Inc.
Englewood Cliffs, New Jersey 07632

Paperback--
COST: $1.50
Available through: Dell Publishing Co.
750 Third Avenue
New York, New York 10017

A sequel to Karen, a best seller in 1952, this book answers many of the letters received by the author in regard to the continuing development of her daughter from childhood to the teens. Here she tells the story of Karen's teen years in a family marked by parental love, mutual respect, and strong religious faith.

USERS: M, NM, C

A.48 Little, Jean. Mine For Keeps. Boston: Little, Brown and Co., 1962, 186 pp. Illustrated by Lewis Parker.

COST: $5.95 hardback
$ .75 paperback (Archway)

Available through: Little, Brown and Co.
34 Beacon Street
Boston, Massachusetts 02106

This fictional story of Sally, who had cerebral palsy and could walk only with the aid of crutches and braces, is for 8-12 year olds. Going home to a new house she had never seen after five years in a school for the handicapped, Sally learned to overcome her fears of fitting into the family pattern and going to school with children who were not handicapped. The new dog, hers "for keeps," helped her adjust to the new life at home. With only partial vision since birth, the author had experienced the same feeling in public school in Canada.

USERS: C

A.49 Matterson, E.M. Play with a Purpose for Under-Sevens. Harmonsworth, Middlesex, England: G. Nicholls and Co., Ltd., 1975. Paperback.

Covers playgroups, natural materials, imaginative play, physical activity, pre-learning skills, music, creative activities, books, stories, and story telling.

USERS: M, NM, C

A.50 McDonald, Eugene. Understanding Those Feelings. Pittsburgh: Stanwix House, 1967.

COST: $6.75
Available through: Stanwix House, Inc.
3020 Chartiers Avenue
Pittsburgh, Pennsylvania 15204

USERS: NM, C

A.51 Miers, Earl Schenck. The Trouble Bush. Rand McNally and Co., 1966, 330 pp.

An autobiography of a cerebral palsied person.

USERS: M, NM, C

A.52 Miers, Earl Schenck. Why Did This Have To Happen? 1957, 28 pp.

COST: $ 0.25 PUBN. No. E-17

Available through: National Easter Seal Society for Crippled Children and Adults

An open letter to parents by a late well-known writer and editor who had cerebral palsy. The booklet offers his personal philosophy on physical disabilities and the problems they present to the handicapped, their families, and society.

USERS: NM, C

A.53 Redbook Magazine, ed. Redbook's Parent and Child. New York: Redbook Publishing Co., 1967, 100 pp.
Paperback

COST: $1.25
Available through: Redbook Publishing Company
230 Park Avenue
New York, New York 10017

Contains articles on childhood diseases, and the handicapped; the role of toys; parent-child interaction--teaching right from wrong, helping make friends, bedtime; health--going to the hospital, toilet-training, habits, accidents; food--nutrition, parties; grooming; family activities. Focus is on information and activities which are healthful for any child, "normal" or "disabled."

USERS: C

A.54 Toy Library Association

Available through: Sunley House
10 Gunthorpe Street
London, E17RW
England

Publishes booklets on choosing and making appropriate toys for the handicapped. Covers different age and disability groups, e.g., hearing and language impaired, mentally retarded adults, physically handicapped children.

USERS: M, NM, C

A.55 Vickery, Donald M., M.D., and James F. Fries, M.D. Take Care of Yourself--A Consumer Guide to Medical Care. Reading, Massachusetts: Addison Wesley Publishing Co., 1976, 269 pp. Paperback

COST: $6.00

Covers consumer skills such as health habits, check-ups, home pharmacy, finding a physician, choosing a facility, reducing medical costs, and avoiding fraud. Discusses medical problems such as common injuries; poisons; ear, nose, and throat and skin disorders; fever; back pain; shortness of breath; indigestion, and urinary tract disturbances.

USERS: C

- GUIDES FOR PARENTS AND STORIES ABOUT AND BY CEREBRAL PALSIED PERSONS--AUDIO-VISUAL MATERIALS

A.56 CBC Educational Films. "I Am Not What You See." 16 mm color film, 27.5 min.

Available through: CBC Educational Films
P.O. Box 500 - Terminal A
Toronto, Ontario, M5W1E6
Canada

A film about Sondra Diamond, who is quadraplegic due to cerebral palsy. A practicing psychologist, she tells about her problems and feelings: "I am not a disabled person. I am not what you see visually. I am a woman."

USERS: M, NM, C

- FUTURE PLANNING

A.57 Dickman, Irving R. No Place Like Home: Alternative Living Arrangements for Teenagers and Adults with Cerebral Palsy. 1975, 111 pp. Paperback

COST: $2.25
Available through: United Cerebral Palsy Associations, Inc.
Professional Services Program Dept.

This publication describes several existing alternative living programs and covers important considerations in the establishment of such living arrangements. The approaches presented here are flexible and creative, and at the same time "reasonable" to the cerebral palsied person and "practical" for a supporting agency to implement.

USERS: NM, C

A.58 Folsom, Geneva S. Good Work Habits, A Pre-Vocational Skill Training Program. Johnstown, Pennsylvania: Mafex Associates, 1971. Paperback workbook

COST: $3.95
Available through: Mafex Associates, Inc.
111 Barron Avenue
Johnstown, Pennsylvania 15902

To be used with teenage and young adults in a group, school, work activity center, etc. Gives introduction to jobs available. Reading level: 2.6 grade.

USERS: NM

A.59 Heaton, Edythe L. Skills in Living - Toward a Richer Tomorrow: For Adults and Teenagers with Cerebral Palsy. 1975, 80 pp. Paperback

Available through: United Cerebral Palsy Associations, Inc.

USERS: C

A.60 Helsel, Elsie D., and Earl C. Graham. Tomorrow is Today: Planning a Future Now for Those with Cerebral Palsy. 1973.

COST: $ 0.30
Available through: United Cerebral Palsy Associations, Inc.

To assist parents in planning for the future of cerebral palsied children who will not be able to live independently. Contains information on trusts, insurance, housing.

USERS: NM, C

A.61 High, Elizabeth C., O.T.R. and Kathy L. Moyers, R.T. Developing Prevocational/Vocational Skills in Developmentally Disabled Persons. Washington, D.C.: Job Development Lab., Div. of Rehab. Medicine, George Washington Univeristy, 1976, 105 pp.
Paperback

COST: $2.00

A manual to teach good work habits through recreation or in a pre-vocational or vocational setting. Includes a check list of employability factors that should be aimed for from infancy.

USERS: M, NM

A.62 National Association for Retarded Citizens. How to Provide for Their Future.

Available through: National Association for Retarded Citizens

Pamphlet with suggestions for parents concerned with providing lifetime protection for a retarded child. Includes information on SSI, Medicaid, Medicare, etc.

A.63 U.S. Department of H.E.W. Social Security and Cerebral Palsy. DHEW Publication No. (SSA) 75-10126.

Available through: U.S. Department of H.E.W.
Social Security Administration
U.S. Government Printing Office
Washington, D.C. 20402

USERS: C

A.64 Laurie, Gini, ed. Housing and Home Services for the Disabled. Hagerstown, Maryland: Harper and Row, 1977, 415 pp. Illus.

Excellent information on al aspects of housing for the disabled--independent or with attendants, many examples of international solutions as well.

• FUTURE PLANNING--AUDIO-VISUAL MATERIALS

A.65 United Cerebral Palsy Associations, Inc. "When May Comes, We'll Move to the First Floor." 16 mm b&w sound film, 22 min.

Available through: LOAN
United Cerebral Palsy Associations, Inc.

Narration based on a severely involved cerebral palsied woman's diary, giving insight into her hopes and fears and concern over her aging mother who takes care of her. Comes with discussion guide.

USERS: NM, C

B. POSITIONING AND SEATING

- RATIONALE FOR PROPER POSITIONING AND MANAGEMENT TECHNIQUES

The child who does not develop normally due to neurological and/or visual impairment often combined with mental retardation may not learn to roll, sit, crawl, stand or walk as soon as the normal child. The severely impaired person may never be able to accomplish these skills without aids. As this child may not take the initiative himself to move about, he may be left lying in a crib or playpen for most of the day. If a child is left in the same position, his environment is very limited. The normal child learns from his environment as he receives a great variety of stimuli through the things he sees, touches, hears, smells and tastes. If left in one position, his world is limited to the same stimuli over and over again; in this way his learning experiences are diminished. Besides limiting the child's environment, lack of attention to positioning may allow the child to develop deformities due to muscle imbalance. These deformities can become fixed, making it difficult to put the child or adult in any kind of functional position for feeding, hand activities and speech and therefore further limiting the person's development. The parents, teacher, therapists and other direct care personnel must assist the handicapped child through proper handling and positioning and frequent repositioning.

The handler must be aware of the child's physical problems. Does he have abnormal reflexes that make him arch his back (extensor thrust) so that he cannot sit in a common chair? Does he lack voluntary control of his head and arms so that instead of raising an object in his hand closer to his face to examine it better, his arm straightens out and he turns his head away (tonic neck reflex)? Mary Fiorentino's book Reflex Testing Methods for Evaluating C.N.S. Development (A16) will assist the therapist in determining the child's reflex deficits.

When arranging special positioning for the cerebral palsied child--whether sitting in a chair, standing, or lying on a mat--one must be aware of what support will help the child and what might just increase his abnormal posture. Ms. Finnie's book (A15) gives excellent guidelines for handling and positioning the young cerebral palsied child. Other references listed in Section A also give instructions on handling the cerebral palsied child (A9) (A11) (A12) (A22) (A24) (A25).

It is very important that the child not be left in the same position for long periods of time. The normal person is constantly shifting his position, and through this normal body movement the baby, then child, gradually becomes aware of himself and his body parts and how they feel when moving about. Thus he develops control. The child who lacks this voluntary mobility needs to have a planned program to help him develop this awareness as well as his normal reflexes. Too much physical support could inhibit or retard further this learning process. Too little support could make the child feel insecure,

instigate abnormal reflexes, or allow the child to assume incorrect postures, thus developing or reinforcing deformities. The prevention and/or correction of deformities is one of the primary considerations for this concern with proper positioning. An article by Mary Cristarella in the American Journal of Occupational Therapy (B1) compares different types of seating for the spastic child. She concludes that straddling-type seating helps support the child and break up abnormal patterns.

Another consideration for proper positioning is the creation of a stable base from which the person may function. If the child or adult is to use his hands for a task, he must be positioned for optimum efficiency. If the person is slouched down in his chair or the work surface is too high or too low, he will not be able to perform at his best, if at all. The cerebral palsied person needs to be in a secure, comfortable position for optimum hand use. Sometimes he may need to have his arm or leg stabilized or restrained to prevent excess involuntary motion. The vocational counsellor and workshop supervisor should be aware of these considerations, for they can have considerable effect on the productivity of the worker.

Proper positioning can also aid the cerebral palsied person in effective communication. In order for the respiratory and oral-motor musculature to work properly--i.e., breathing, biting, lip closure, swallowing, tongue control--the cerebral palsied person must be positioned so that he is relaxed and comfortable. (Oral-motor facilitation techniques will be discussed later in the section on feeding.) If the person is to use his hand or fingers to point as an assist to communication, this must also be taken into account. It must be noted that positioning is not just seating, but refers as well to body alignment in standing, lying, sitting on the floor and performing any activity--for example dressing, bathing, toileting and playing games. Refer to the chapter "Positioning for Speech" in Cerebral Palsy and Communication: What Parents Can Do (B2) for elaboration on this subject.

Because positioning is important to all functions of the cerebral palsied person, its importance cannot be pointed out too strongly.

- EQUIPMENT FOR POSITIONING

A variety of special chairs for severely disabled persons presently are available commercially, and new models are appearing on the market continually. Also, several easily constructed chairs (B6) (B9) (B20) or chair inserts (B18) (B11) may be built if it is not considered necessary or feasible to buy one of the expensive commercial ones. The Job Development Laboratory at The George Washington University has developed a chair insert built from a semi-rigid polyethylene foam for a child with severe extensor thrust. The laboratory sees this material used for constructing and adapting other types of seating because the material is easily worked with and relatively inexpensive (B25).

The various therapeutic chairs offer many different features, including headrests, padded side supports for shoulder support and prevention and correction of abnormal spinal curves, abduction posts to correct "scissoring" of legs, seat belts, inclining seats and backs, adjustable footrests, and lap boards. Some of these chairs are appropriate for the person with severe hip contractures and scoliosis (B22) (B26) (B27) (B32). The needs of the person must be carefully evaluated before deciding which chair will be most useful.

A specific seating problem is presented when transporting the severely handicapped person in a car or bus. For the infant or child, there are a number of car seats on the regular commercial market that provide good support, or stroller-type chairs like "Runabout" (B36) can be converted into a car seat by retracting the back wheels (B17) (B28) (B34) (B38) (B39). However, as the child grows, it becomes difficult to lift him and find supportive seating that is big enough. Many persons solve the transportation problem by getting a van with a ramp or a lift (Section F) and eliminating the necessity for the person to leave the wheelchair. A vacuum-formed contour seat can be custom made by the Contourpedic Corporation (B15) and used either in a wheelchair or a car seat. It is possible that a less expensive contour seat could be fabricated out of "Ethafoam 2" as has been done for a wheelchair insert (B25). Another possible solution might be to have a Recaro Seating System (B42), designed for use in racing cars to give extra safety and support, installed in place of the passenger seat. The Recaro seat, which includes head and side support and can be used in conjunction with a harness, is an exceedingly comfortable seat and can be valuable for other persons as well as handicapped persons. The transfer problem is difficult and should be thought of before the child reaches the size that makes it impossible to lift him. Wherever feasible the cerebral palsied person should be taught to do a "standing transfer" to assist in getting into a car. (See Section E for information on lifts for transferring persons from wheelchair into a car.) (E11) (E15)

As was mentioned before, positions should be changed frequently. An alternative position to sitting is on a "prone board" or "standing board." These boards make it possible for the handicapped person to go from a prone position to a standing position in stages. Even if the person may never stand alone, this alternate position assists him by straightening out his legs and back as much as possible and giving him a new perspective on his environment. There are a variety of "prone boards," some with wheels (B45) (B47) (B53) (B55) (B56), some with working surfaces (B47) (B53) (B55), some easily constructed by a carpenter (B6) (B9) (B45) (B50). It is again necessary to evaluate the person's needs and choose the most appropriate aid.

To assist in a variety of other positions on a mat, on the floor, on a bed, or in a chair there are wedges, rolls, and cushions available through a variety of commercial sources (B57) (B58) (B59) (B60) (B61) (B62). Wedges and cushions can also be cut from "Ethafoam 2." It must be emphsized again that the choice of equipment and adaptation should be guided by qualified professionals, preferably a team including physician, physical therapist, occupational therapist, speech therapist, rehabilitation engineer, carpenter and wheelchair specialist or other qualified person.

B. REFERENCES—POSITIONING AND SEATING

- RATIONALE FOR PROPER POSITIONING AND MANAGEMENT TECHNIQUES

Copeland, Mildred; Ford, Lana; and Nancy Solon. Occupational Therapy for Mentally Retarded Children. See A11.

B.1 Cristarella, Mary C. "Comparison of Straddling and Sitting Apparatus for the Spastic Cerebral Palsied Child." American Journal of Occupational Therapy 29:5 (May-June 1975).

Straddling positioning, putting lower limbs in abduction, flexion and external rotation allowed the removal of restricting straps from some spastic children. Straddling can be used as one of several positions.

USERS: M, NM

Finnie, Nancie R. Handling the Young Cerebral Palsied Child at Home. See A15.

B.2 High, Elizabeth C. "Positioning for Speech." in Arlene Golbin, ed. Communication and Cerebral Palsy: What Parents Can Do. 1978.

COST: $6.00
Available through: The Job Development Laboratory
George Washington University
Medical Center

A guide to proper positioning to facilitate speech.

USERS: M, NM, C

B.3 Kametz, Herman L., M.D. The Wheelchair Book--Mobility for the Disabled. Springfield, Illinois: Charles C. Thomas, 1969.

An interesting history of wheelchairs and their development. An excellent guide to proper choice of wheelchairs, including measurement and special considerations. Also, sections on wheelchair operation, transfers, sports, and care.

USERS: M, NM, C

Pearson, Paul H., and Carol Williams. Physical Therapy Services in the Developmental Disabilities. See A22.

Trombly, Catherine Ann, and Anne Scott. Occupational Therapy for Physical Dysfunction. See A24.

• RATIONALE FOR PROPER POSITIONING AND MANAGEMENT TECHNIQUES-- AUDIO-VISUAL MATERIALS

B.4 Bergen, Adrienne, R.P.T.; Colangelo, Cheryl, O.T.R.; and Linda Lehrer Gottlieb, C.C.C-S.P. "Positioning and Adaptive Equipment for Children with Central Nervous System Deficits." 35 mm slide program with audio cassette, 75 min.

COST: $90.00
Available through: Blythedale Children's Hospital
Bradhurst Avenue
Valhalla, New York 10595
(914) 592-7555

Illustrates principles involved in positioning and adaptations for dressing, feeding, bathing, toileting and arm use.

USERS: M, NM, C

B.5 Goodwin, Roberta, O.T.R.; Magee, Margaret, R.P.T.; and Lester Howell. "Adapted Equipment for the Cerebral Palsied Child." 1975, 16 mm color sound, 10 min.

COST: $10.00 to rent

Available through: Richmond Cerebral Palsy Center
1308 Sherwood Avenue
Richmond, Virginia 23220

Film presenting current positioning theories--includes seating (straddle seats), mobility, prone boards, platform shoes, etc. Written instructions for constructing equipment also available.

USERS: M

• LITERATURE ON EQUIPMENT FOR POSITIONING

B.6 Bergen, Adrienne, R.P.T. Selected Equipment for Pediatric Rehabilitation. 1975. Illus.
Spiralbound paperback

Available through: Blythdale Children's Hospital
Bradhurst Avenue
Valhalla, New York 10595
(914) 592-7555

Well illustrated guide to equipment for positioning, transfers, ambulation, toileting and therapy.

USERS: M

B.7 Carrington, Ellen G. "A Seating Position for a Cerebral Palsied Child." American Journal of Occupational Therapy 32:3 (March 1978), pp. 179-181.

Description of an alternate seating position for a cerebral palsied child who uses his feet for many activities. Features a lap board with a removable midsection panel to increase visability of the feet.

USERS: M

B.8 Doherty, Jacqueline F. "Weighted Shoulder Harness for Children with Cerebral Palsy." Physical Therapy 29:1 (Jan.-June 1969), pp. 503-504.

Description of a suspender-like harness with weights for use with athetoid cerebral palsy to stimulate postural-promoting trunk stability.

USERS: M

B.9 Hofman, Ruth B. How to Build Special Furniture and Equipment for Handicapped Children. Springfield, Illinois: Charles C. Thomas, 1974, 100 pp.
Paperback

COST: $6.50

Explicit instructions including pictures, measurements and materials for making a standing board, a cut-out table, a standing table, chair inserts, a potty chair, etc.

USERS: M, NM

B.10 Lowman, Edward, M.D., and Judith I. Klinger, O.T.R., M.A. Aids to Independent Living, Self-Help for the Handicapped. New York: McGraw-Hill, 1969, 796 pp.

COST: $42.50
Available through: Institute of Rehab. Med.
N.Y.U. Medical Center
The Blakiston Division

Well illustrated book of self-help, ambulation, furniture, communication, and vocational, recreational and transportation aids. Most comprehensive book of its type available.

USERS: M, NM

B.11 Macey, Patricia G. Mobilizing Multiply Handicapped Children, A Manual for the Design and Construction of Modified Wheelchairs. 1974.

COST: $5.00
Available through: Division of Continuing Education
University of Kansas
Lawrence, Kansas

Detailed instructions for modifying wheelchairs; includes measurement, fitting, carpentry, upholstery and lap trays.

USERS: M, NM

B.12 Robinault, Isabel P., ed. Functional Aids for the Multiply Handicapped. Hagerstown, Maryland: Harper and Row Publishers, 1973, 223 pp.

COST: $14.95

An excellent guide to aids for cerebral palsied children. Includes dressing, feeding, seating, communication, etc.

USERS: M, NM

B.13 White, Jeanine, O.T.R. "The Stimulus Box"--(for the profoundly mentally retarded). American Journal of Occupational Therapy 30:3 (March 1976).

Directions for construction of a stimulus box to provide different kinds of environments for visual, tactile, proprioceptive and auditory input.

USERS: M, NM

• EQUIPMENT FOR POSITIONING

Chairs

B.14 Abbey A-BEC Electric Wheelchair
Abbey Medical
Toll free no. (800) 421-1170

COST: Approx. $1,000.00-$1,300.00

Lightweight, collapsible, removable battery.

B.14 Abbey A-BEC
Electric Wheelchair

B.15 Achiever™ Seat

Contourpedic Corp.
280 Midland Avenue
Saddle Brook, New Jersey 07662
(201) 791-2500

Positioning support--strong, lightweight, adaptive, flexible, less expensive than custom-built devices; use in tub or shower, indoors or outdoors. Also make custom-made molded seats providing comfortable support; can be used as wheelchair insert or as car seat.

B.15 Achiever Seat

B.16 Adjustable Corner Chair

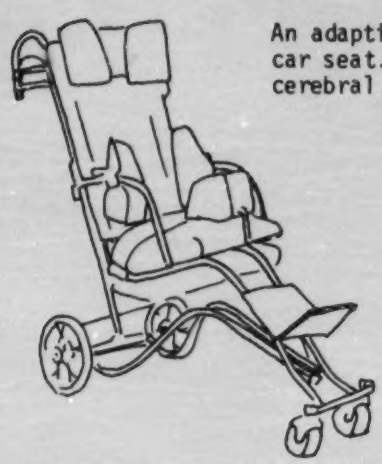
Kaye Products, Inc.

COST: $57.00 MODEL#: 301

With tray and side extensions.

B.17 Care-Chair Model 6301

Care-Chair Systems, Inc.
5602 Elmwood Avenue, Suite 219
Indianapolis, Indiana 46203
(800) 428-9234



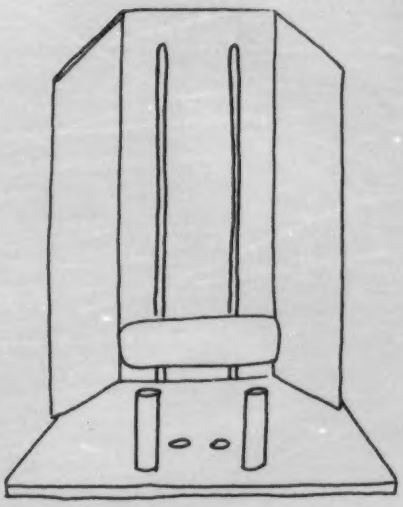
An adaptive positioning system for use as stroller or car seat. Special support systems for multi-handicapped cerebral palsied children. See also B28, B34, B38, B39.

B.17 Care-Chair
Model 6301

B.18 Chair Insert

Children's Rehabilitation Center
Charlottesville, Virginia

Write for instructions to construct.



B.18 Chair Insert

B.19 Corner Seat

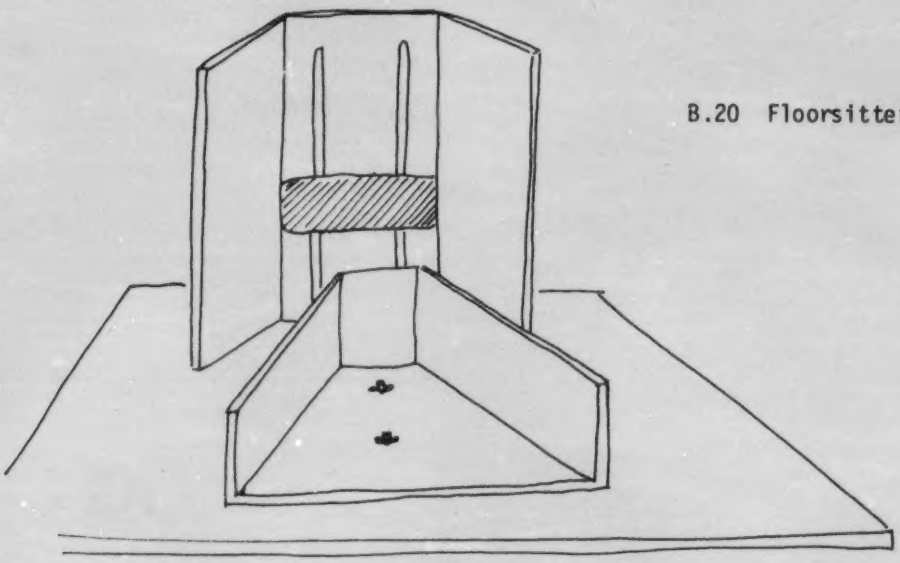
Equipment Shop

COST: $19.95 ORDER#: ES-200; with table ES-250

B.20 Floorsitter

Children's Rehabilitation Center
Charlottesville, Virginia

Write for instructions.



B.20 Floorsitter

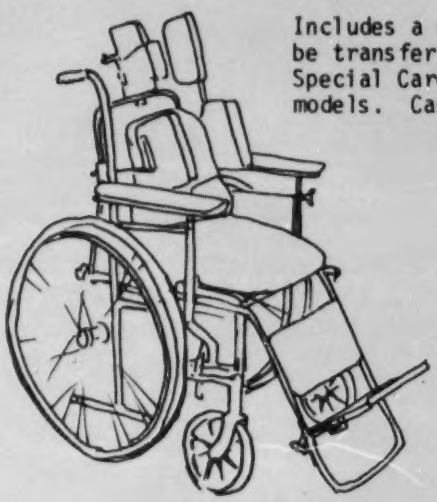
B.21 Instigaiter^{Tm}

Instrument Components Co., Inc.
7239 Industrial Park Blvd.
Mentor, Ohio 44060
(216) 951-3030

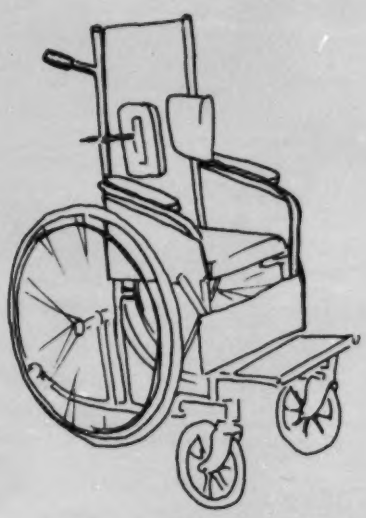
Folding electric wheelchair, lightweight, removable power unit for easy handling. Similar to A-BEC, B14.

B.22 Invacare Exceptional Children's Products
Invacare Corporation

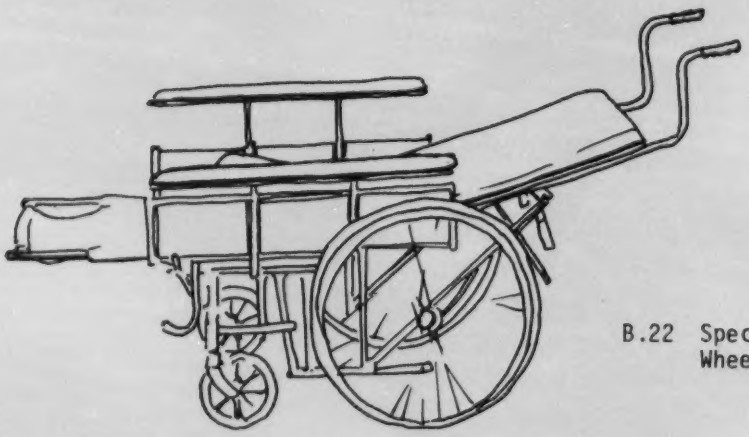
Includes a modular system with wheelchair base that can be transferred to other bases, the Posture C-390, and Special Care Wheelchairs in child to junior convertible models. Can be used for car seat.



B.22 Invacare Modular System



B.22 Posture C-390



B.22 Special Care Wheelchair

B.23 LAKEmatic Power Wheelchair
Lakeside Manufacturing, Inc.
1977 South Allis Street
Milwaukee, Wisconsin 53207

Electric wheelchair.

B.24 The Mancino Chair
Adaptive Therapeutic Systems, Inc.

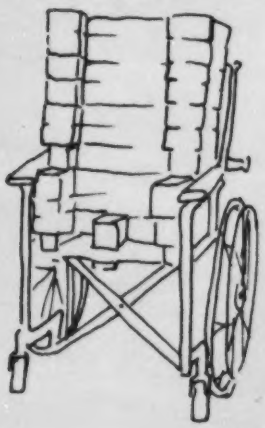
COST: $846.00 Child size; $932.00 Teen size.

A fully adjustable chair for the severely disabled child. Comes with several accessories such as body harness, cutout table, arm slings.

B.24 The Mancino Chair

B.25 Modular Stack Contour Seat
James Mueller, B.I.D.

For information contact: The Job Development Laboratory
George Washington University



Constructed of semi-rigid polyethylene foam in 2" sheets called Ethafoam 2." The curves of the patient's form are transferred to each section with the use of a flexible drawing curve and cut out with an electric saw or knife. Wooden dowels hold stacked sections together (can be removed for disassembly and/or modification). This seat can be covered with terry cloth or other removable cover.

COST: Approx. $30.00 per chair

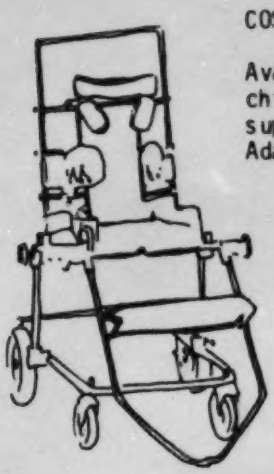
B.25 Modular Stack Contour Seat

B.26 Mulholland Growth Guidance Chairs

L. Mulholland and Associates
1563 Los Angeles Avenue
Saticoy, California 93003
(805) 647-5527

COST: $650.00 - $760.00 (base price)

Available in three sizes (child, 15-50 lbs.; extended child, 30-80 lbs.; junior adult, 40-160 lbs.). Provides support and padding where needed; includes tray. Adaptable for the severely disabled person.



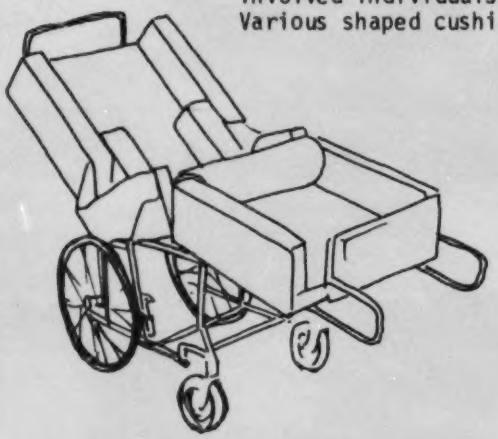
B.26 Mulholland Growth Guidance Chair

B.27 Multi-Position Chair

Everest and Jennings

COST: Approx. $970.00

An adjustable chair designed for severely physically involved individuals to facilitate positioning. Various shaped cushions available to go with it.



B.27 Multi-Position Chair

B.28 Ortho-Kinetic Travel Chair and Care Chair

Ortho-Kinetics, Inc.
P.O. Box 2000
Waukesha, Wisconsin 53186
(800) 558-2151

Adjustable chair with accessories for positioning the severely disabled child. Can be used as a car seat or stroller. Similar to Care-Chair, B17.

COST: Approx. $500.00 ORDER#: 6300

B.28 Ortho-Kinetic Travel Chair and Care Chair

B.29 Pogon Buggy

G. E. Miller, Inc.

COST:	$142.00 with footrest	ORDER#:	GJ 1400
	$126.00 without footrest		GJ 1401
	$ 17.00 insert seat		GJ 1402

A lightweight floding stroller for persons 4 years through adult (up to 140 lbs.). Washable saran seat, adjustable footrest, insert seat for small persons.

B.29 Pogon Buggy

B.30 Pony Chair

Adaptive Equipment Company

COST: $45.00 - $53.00 plus $22.00 for side supports

A roll-type chair which the child straddles. Available in 9", 12" and 15" heights (floor to top of knees). Recommend addition of kick pads to keep knees flexed to 90^{o}.

B.31 Pony Chair Table

Adaptive Equipment Company

COST: $55.00

To be used with the Pony Chair.

B.32 Postura Modular Support System
Everest and Jennings

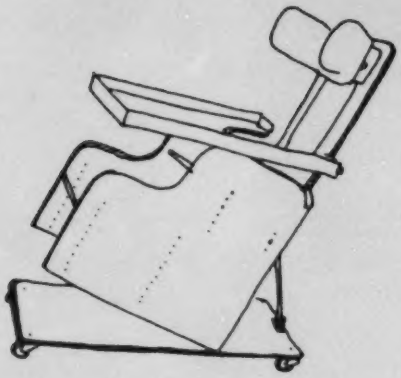
Includes a variety of adjustable features--padded supports, inclinable seat, backrest and footrest, lateral and lumbar back support, neck and headrest support, and abduction post.

B.32 Postura Modular Support System

B.33 Relaxation Chairs

PENCOR, Bailey, J. A. Preston

Many types of relaxation chairs and wheelchairs. See catalogs.



B.33 Relaxation Chair

B.34 Responder Chair

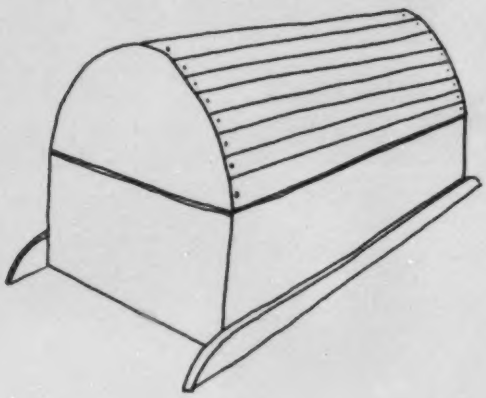
Rehab Med, Rehabilitation Equipment, Inc.

A modular positioning and traveling chair: adjustable chrome plated steel tubing, leatherette upholstery, 8" rear wheels, 5" front swivel casters. Footrests adjust from 6" to 16", backrest 23" from seat. Seat 12" x 12" adjustable with inserts and Scoli-pads. Accessories include "V" belt, Posi-Wedge for leg abduction, ankle straps and Plexi-tray or Plexi-Comm Board (double Plexiglass sheets spaced for communication board or book). Similar to Care-Chair, B17.

B.35 Roll-Top Sitter

Children's Rehabilitation Center
Charlottesville, Virginia

Write for instructions.



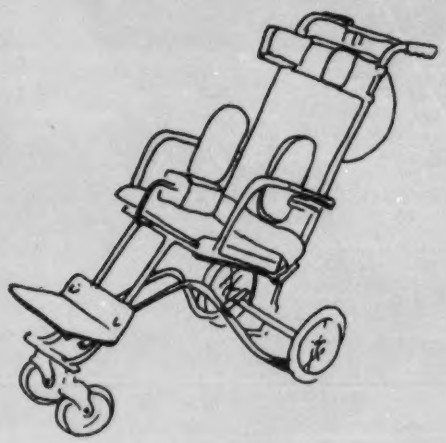
B.35 Roll-Top Sitter

B.36 The Runabout

Stainless Medical Products
3107 South Kilson Drive
Santa Ana, California 92707
(714) 540-1142

COST: $360.00 plus accessories

Combination wheelchair-car seat-stroller. Lightweight, easily maneuvered, retractable wheels for placement in car without removing child. Accessories include trunk support, head support, abductor, back cushions, support straps.



B.36 The Runabout

B.37 Seat Inserts -- Kaye Products, Inc.

COST: $42.00 - $69.00
MODELS: 201, 202, 203 with or without head supports.

B.38 Trans-a-Chair

G. E. Miller, Inc.

COST: $423.00 plus cost of accessories ORDER#: GJ 1410

A positioning chair for children that adapts for automobile travel. Accessories include T-strap, tray, scoliosis pads, head positioner and hip abductor pads. Similar to Care-Chair, B17.

B.39 Transichair

Palmco Engineering Co.
8416 Secura Way
Santa Fe Springs, California 90670

Local distributor: Fairfield Medical Co.
Baltimore, Maryland

Similar to Care-Chair, B17.

Car Seats

B.40 Car Safety Seat

Cosco Home Products
2525 State Street
Columbus, Indiana 47201

COST: $40.00

Infant carrier and/or seat for children up to 40 lbs. or 40". Fastens with car seat belt.

B.40 Car Safety Seat

B.41 Car Seat Insert

Functional Aids for the Multiply Handicapped, B12.

Upholstered wooden car seat with head and side support; one side hinged for easy entrance and exit. Can be made any size.

B.41 Car Seat Insert

Care-Chair Model 6301
Care-Chair Systems, Inc. See B17.

Harness for Car Seats
See G7.

Harnesses See also: Sears, J.A. Preston, Rehabilitation Equipment

Invacare Exceptional Children's Products
Modular system. See B22.

Ortho-Kinetic Travel Chair
Ortho-Kinetics, Inc. See B28.

B.42 Recaro Seating Systems
Electrodyne, Inc.
2316 Jefferson Davis Highway
P.O. Box 358
Alexandria, Virginia 22313
(703) 836-4641

COST: Approx. $360.00

A seat designed for racing cars giving side and head support. Replace any car bucket seat with this system. Can be used in conjunction with a harness. Comfortable for all family members.

B.42 Recaro Seating Systems

The Responder Chair
See B34.

The Runabout See B36.

Trans-a-chair See B38.

Transichair See B39.

B.43 Travel Chair for Children
Abbey Medical

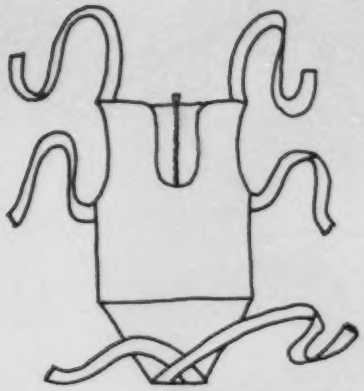
COST: Approx. $300.00 ORDER#: AM07-1034

Stroller with retractable back wheels. Similar to Care-Chair, B17.

B.44 Vest for Trunk Support

Functional Aids for the Multiply Handicapped, pp. 31.

Instructions for making a vest to give support in a car or chair. See B12.



B.44 Vest for Trunk Support

Toilet Seats

See Section E: Hygiene

Tub Seats

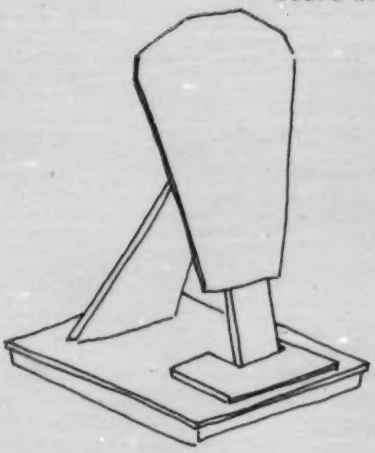
See Section E: Hygiene

Prone Boards and Standers

B.45 Adjustable Prone Board

Child Development Center of Northern Virginia
111 North Cherry Street
Falls Church, Virginia 22046

Instructions available for construction of a prone board with platform base and casters.

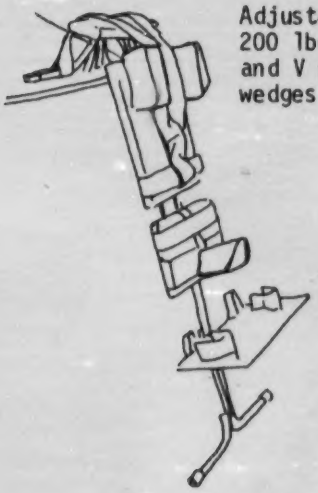


B.45 Adjustable Prone Board

B.46 The Aronson Portable Prone Stander

Rehab Med
Rehabilitation Equipment, Inc.

Adjustable prone stander of aluminum tubing holds up to 200 lbs. Accessories available: chest, hip, heel, toe and V straps; hip abductor; Scoli-pads; Dorsi plantar wedges. No wheels, nor work surface.



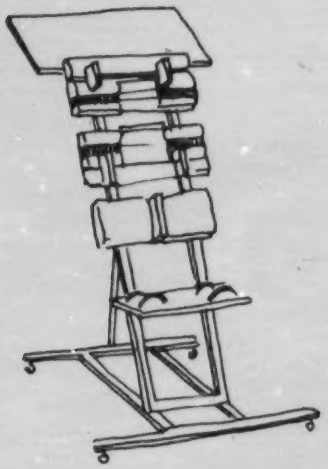
B.46 The Aronson
Portable Prone Stander

B.47 ATS Prone Board

Adaptive Therapeutic Systems, Inc.

COST: $461.00

Completely adjustable and portable. Comes with tilt desk, scoliosis pad, upper middle knee and foot boards, back and hip straps, abductor and foot placement blocks, casters with brakes.



B.47 ATS Prone Board

B.48 Prone Board

Robert C. Adams Co.
9528 Shoreland Drive
Bellevue, Washington 98004

COST: $100.00 plus shipping.

Limited adaptations available.

B.49 Prone Board

Adaptive Equipment Co.

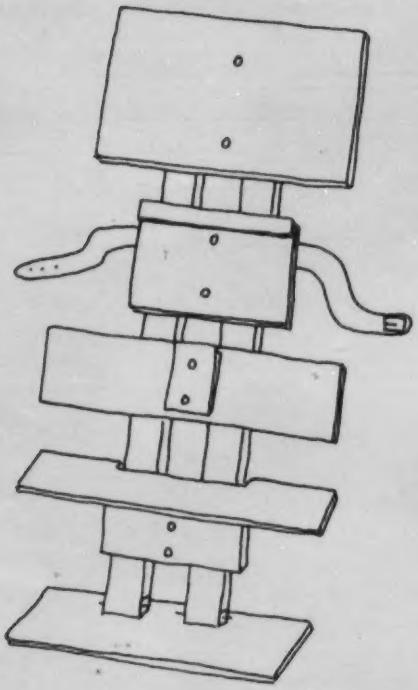
COST: $42.50 - $47.50 (as of 2/76)

Three lengths, no adaptations.

B.50 Prone Board

Children's Rehabilitation Center
Charlottesville, Virginia

Write for instructions.



B.50 Prone Board

B.51 Prone Board

Equipment Shop

COST: $62.50 (base price)

Many adaptations available at additional cost.

B.52 Prone Boards

Kaye Products

COST:	$115.00	Model 104 --	leaning type
	$185.00	Model 103 --	free-standing with desk
	$105.00-235.00	Adult Size --	free-standing with desk

B.53 Prone Stander

L. Mulholland and Associates

For child up to 50 lbs. or junior adult up to 140 lbs. Fully adjustable, has tray work surface, Velcro straps, long wheelbase, rear wheel brake.

B.53 Prone Stander

B.54 Prone Boards, Vestibular Boards

PENCOR

Similar to Prone Board, B50.

B.55 Standing Adjustable Prone Board

Invacare Corp.

A prone board on casters, fully adjustable.

B.55 Standing Adjustable Prone Board

B.56 Standing Table

Daily Aids for the Handicapped
1551 Willowside Road
Santa Rosa, California 95401

COST: $ 158.00 plus tax and shipping

Comes in three sizes--small, standard, adult. Offers maximum adjustability, excellent control of hip, knee, ankle alignment. Stationary or on casters.

Wedges, Rolls, Mats

B.57 Adaptive Wedges

Adaptive Equipment Co.

COST: $35.00 - $45.00

B.58 MED Non-Slip Wedge Cushions

Medical Equipment Distributors, Inc.

COST: $20.00 - $30.00 MODEL#: M01-3290

Prevents child from sliding forward in chair.
(Proven successful with severely spastic persons.)
Measure 3" x 12" x 12" to 3" x 16" x 18".

B.59 Roll Mats, Wedges

PENCOR

Cotton and foam filled.

B.60 Supination and Pronation Wedges

Kaye Products, Inc.

B.61 Therapy Roll

Adaptive Equipment Co.

COST: $30.00 - $55.00

B.62 Tumble Forms

Tumble Forms Corp.
6511 Spencer Street, Ext.
Dolgeville, New York 13329
(315) 429-4671

COST: $6.00 - $30.00

Also available through J. A. Preston.

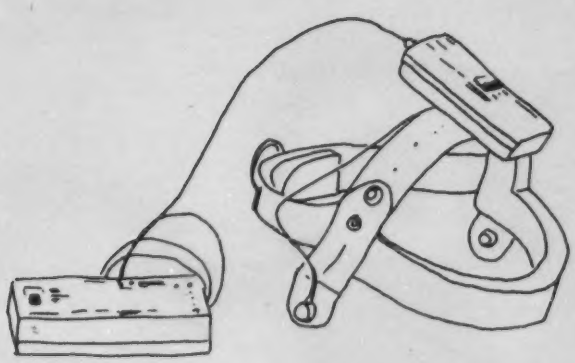
Other Positioning Equipment

B.63 Head Position Trainer

Adaptive Therapeutic Systems, Inc.

A biofeedback training system for positional head control problems of cerebral palsied persons. Consists of head band with self-contained, rechargable, battery-powered mercury switch device. Adjustable volume control, interconnection with motivational devices, data collection, Developed by Ontario Crippled Children's Centre, Toronto, Canada.

B.63 Head Position Trainer



C. FEEDING

- TECHNIQUES

The area that often first concerns the parents of the cerebral palsied child is that of feeding. This may be where the mother first notices that something is wrong with the baby. He may not suck properly. He may have difficulty swallowing. He may appear to gag or choke on the milk. As the baby gets older and the mother attempts to introduce solid food, these same problems become more apparent, and there may even be occasional aspiration of food (food particles trapped in the lung). All of these problems are indications of poor muscle control.

To understand the normal feeding process and to better cope with these first feeding problems read Feeding Your Baby: The Safe and Healthy Way (C18) by Ruth Pearlman and "Development If Sucking and Swallowing," (C3) an article in the Cerebral Palsy Journal. A 15-minute slide/tape package entitled "Normal Progression of Feeding with Suggested Techniques for Correction of Pathological Conditions" (C27) available through Meyer Children's Rehabilitation Institute, shows the normal developmental stages as well as techniques for remedying pathological feeding problems. Another slide/cassette program put out by Meyer and entitled "Beyond Survival, Development of Feeding Skills," (C26) goes into more detail on the same topic. This comes in three parts and can be useful for the training of professionals as well as parents and other direct care staff.

Handling the Young Cerebral Palsied Child at Home (A15), Speech Therapy and the Bobath Approach to Cerebral Palsy (C6) and "Feeding Therapy and Speech: Some Problems of Oral-Motor Control" by Roberta Liebman (C13) give excellent basic guidance to feeding the cerebral palsied child. These along with other books, articles and films listed in the resource section of this chapter also provide direction in coping with specific feeding problems such as tongue thrust, gagging, biting, and drooling. Additionally, oral facilitation techniques are described by Margaret Rood (A23), Shereen D. Farber (C8), and Helen A. Mueller (A22). Choosing the correct oral facilitation techniques for the individual child should be conducted by a professional with the full participation of the family. These techniques vary considerably, but all have the common aim of assisting the cerebral palsied person in gaining optimum control of his oral musculature so that he can enjoy and be nourished by his meals and develop speech.

The specific problem of drooling has been dealt with in several different ways from surgery to orthodontics (C10). Nutritionists point out that too sucrous (sugary) food and overmedication can also cause drooling.

It should be noted that medical as well as developmental causes for feeding problems should be sought. Regurgitation of food, for example, can be caused by a blockage or hernia.

• AIDS AND EQUIPMENT

As the child becomes developmentally ready to feed himself, he may need some aids to make this possible. Adaptations of utensils are useful, many of which are available commercially (C44) (C45). However, using instructions available in a number of sources (B6) (B12) (C32) (G13), a clever person can adapt a regular spoon with a foam curler or some splinting material such as Rolyan Plyform (G26). A scoop dish (C43) or plate guard (C41) will keep the food from being pushed off the plate. If the plate slides about on the table, a rubber place mat, a wet wash cloth or a piece of Dycem (G6) (G18) (G27) placed on the table under the plate can help stabilize the plate. Various cups and glasses--some weighted, some easier to hold, and some with no-spill tops--make management of liquids easier. One glass that is particularly useful for the severely involved cerebral palsied person is the "Nosey Cut-out Glass" (C40) made of soft plastic; it prevents the person from tipping his head back and aspirating as the cut-out fits over the ridge of the nose. The various cups and glasses are available through the suppliers of the adapted aids (see Section G).

In some cases these aids are not sufficient to make the cerebral palsied person independent in feeding. If the person is unable to coordinate his hand and arm muscles sufficiently to get the food from his plate to his mouth, mechanical aids might prove successful. Such aids can serve as training devices to help the child develop the necessary motor patterns to feed himself. Also, the child with oral-motor problems is relieved of much of the worry about controlling his arm, and therefore becomes more relaxed and can concentrate on chewing and swallowing. The "Pulley-Eater" (C36), a system of counterbalances and adjustable tension, is designed for the poorly coordinated person, but requires the person to feed himself. This may be useful as a trainer since the cerebral palsied person actually guides the spoon himself. Other devices such as "The Two-Step Eater" (C37), the "Cerebral Palsy Feeder" (C35), the "Beeson Automaddak Feeder" (C34), and the "Spoon Lifter Feeding Device" (C38) do not require the person to go through the actual feeding pattern, but are controlled by buttons or levers and require very little arm control. Some can actually be controlled by a head stick or could be adapted for foot control. Good head and oral-motor control are necessary to remove the food from the spoon.

Before one of these expensive and not always satisfactory mechanical devices is bought for the severely disabled person, the therapist should explore alternative methods: for example, perhaps the person could use his feet for feeding. One such person finds a fork extended to 23" (G27) works very well for any foods he can spear. (He drinks liquids through a straw, but must be fed any foods that have to be served with a spoon.) Several sandwich holders are available (C33) (C42) that can be attached to a table or wheelchair or held with the hand or foot; these can make the severely involved person partially independent at lunch time.

Because the ability to feed oneself may be required for a person to be employed, the simplest and least conspicuous method should be worked out for the noon-time meal. One possible solution is for him to drink his lunch.

Several liquid meals are availble (C71-C75). However, the physician should be consulted to be sure this will give enough nourishment for this person. Many cerebral palsied persons burn extra calories with their involuntary motions, so they need to consume food with more calories to keep up their energy. A nutritionist or dietician can assist in the correct choice of foods to provide sufficient calories and other nutritional content.

Much thought needs to be given to the choice of the right aids for each individual and should be done with professional guidance. An occupational therapist has the most experience in this area. However, a speech therapist should be consulted as well to be sure that none of the aids are contraindicated in the person's oral-motor control and speech programs. This factor is particularly important when considering the use of straws for a person with poor speech or tongue thrust. In some cases the different advantages of the use of the straw need to be weighed against the possible further retardation of speech and/or tongue control.

Of course, some severely involved cerebral palsied persons are unable to manage any part of their own feeding and must be fed by someone else. As was mentioned in the previous section, the person needs to be properly positioned whether feeding himself or being fed. The "Nosey Cut-out Glass" (C40) makes serving liquids easier in an upright position. Reevaluation should be done periodically to be sure the appropriate equipment is being used and to give an opportunity for possible indications for beginning self-feeding. Parents and other direct-care persons should not assume that a cerebral palsied person will always be unable to feed himself just becuase he was unable to do so at the appropriate age.

- NUTRITION

The cerebral palsied person is susceptible to all the same illnesses as other people. However, often he does not receive proper nourishment because of feeding problems--poor oral-motor control, poor hand-mouth coordination or slowness. As discussed previously, the severely involved cerebral palsied person often burns extra calories in involuntary motion or spasticity. The spastic paraplegic who is wheelchairbound often has a weight problem. Sometimes parents, in their effort to make up for some of the things their cerebral palsied child cannot do, tend to overfeed him with extra meals or in-between-meal snacks. Such parents need to stop and think if they are guilty of overfeeding and therefore are contributing to the development of poor eating habits and health problems such as obesity, constipation, poor complexion, etc. Snacks should be kept to fruit or juices or, if extra calories are needed, one of the "liquid lunch" possibilities (C71-C75).

Many factors contribute to the good or bad nutrition of an individual: family preferences and customs, attitudes of family and friends or fellow workers towards the individual's eating habits and the individual's own food preferences. He may gag or make faces when new foods or textures are introduced. Often a parent will interpret this as a rejection of the food

and take the food away. However, this is only another involuntary reaction that he must learn to control. The cerebral palsied person should be exposed to many different tastes and textures just as the normal person. If he is eating pureed or junior foods, attention should be given to seasonings to make the food interesting. Mealtime should be pleasant so that the person enjoys his food without feeling rushed or that he is a burden to others (C19) (C24). Efforts to correct poor table manners and feeding habits should be presented in a way that will not make him feel discouraged or ridiculed by the family.

Parents and institutions are encouraged to use some of the guides listed in the resource section of this chapter to be sure that the cerebral palsied persons in their care are receiving a well-balanced diet that contains the extra calories and vitamins necessary for them to function at their best (C47) (C52). The various state agricultural extension services often have good material available for teaching classes in basic nutrition. As the child grows, he should learn what these dietary needs are so that he will continue to eat properly when at school and/or living independently. To assist in this learning process, several games can be used to teach good nutrition (C68) (C69) (C70). The teenager who tends to be overweight must learn to be weight conscious. As this person grows older, he becomes less active. The semi-ambulatory (walking with crutches) person then can become wheelchairbound as it becomes more difficult to move the increasing weight around. Being wheelchairbound adds the other problems of the possible development of pressure sores and the difficulty of accessibility--getting through doorways, climbing steps, finding transportation, etc. Every effort should be made to prevent these added problems.

The area of nutrition cannot be emphasized too strongly. If a person is not properly nourished, his whole health is affected. He gets sick more often; he does not think and learn well; he fatigues easily. When a person takes a long time to eat a meal, the temptation is for him to choose the foods he likes the best or those that give quick energy. This practice can lead to serious nutritional deficits that might have a lasting effect.

• SPECIAL NUTRITION CONCERNS

Concern is growing about the effect of extended drug use on the total health of the person. In some instances there is evidence of drug-induced vitamin deficiencies (C61) (C64) (C65). Many cerebral palsied persons do take drugs for muscle relaxants or for anti-convulsants to facilitate optimal functioning. In such cases, the drug dosage should be reevaluated from time to time to be sure that it is still appropriate for the individual. The physician and nutritionist should be consulted to see if there are dietary changes that could help offset any possible side effects from the drugs being taken.

Another area that has been discussed extensively in the last few years is the effect of certain food additives on the bahavior of some children (C58) (C60). Although there are many sides to these theories, they could be

worth considering when trying to determine why a child has difficulty in concentrating on his school work or sitting still for a few minutes.

- MEALTIME BEHAVIOR

Another considetation for the cerebral palsied person is behavior while eating. As was mentioned before, mealtime should be made as pleasant as possible, as emphasized in Mealtimes for Severely and Profoundly Handicapped Persons - New Concepts and Attitudes (C19) (C29). Every effort should be made to make the food palatable and interesting even if it must be chopped or pureed. Check with the physician or nutritionist to see if the drugs the person is taking may be dulling his taste buds. The addition of a little salt, pepper or curry may make a great difference in the child's interest in food. If there are feeding problems, possible medical reasons for refusal to eat, regurgitation or apparent discomfort after eating should be reviewed by the physician.

Consider also the behavior of the family at mealtime. Does the family include the cerebral palsied person as a regular part of the family or do they find his eating habits unappetizing? In the latter case, perhaps the messier part of the meal could be fed to that person before the rest of the family eats. The he can finish the foods he eats best with the family.

Even the most severely retarded person seems to be aware that his mealtime behavior can be a very effective manipulative tool. For some this may be the only time he seems to be able to have any control over those around him. He knows that such behavior as refusal to eat or regurgitation can upset the parent or other feeder. Therefore, every effort should be made to prevent this type of behavior from developing by using "positive reinforcement" for good behavior and ignoring as much as pussible the bad behavior. A number of guides for handling these situations are listed in the resource section (C1) (A37) (C9).

C. REFERENCES—FEEDING

• FEEDING TECHNIQUES

C.1 Barton, E.S., et al. "Improvement of Retardates' Mealtime Behavior by Time-Out Procedures Using Behavior Modification Techniques." Jour. Appl. Beh. Anal. 3:77 (1970).

USERS: M, NM

C.2 "The Blanchard Method for Feeding." American Journal of Occupational Therapy 20:1 (1966).

USERS: M

Blumenfeld, Jane; Thompson, Pearl E.; and Beverly S. Vogel. Help Them Grow. See A37.

C.3 Bosley, Elizabeth. "Development of Sucking and Swallowing." Cerebral Palsy Journal 26:6 (1975), pp. 14-16.

Feeding techniques for cerebral palsied babies with feeding difficulties. Facilitation of chewing, sucking, and swallowing.

USERS: M, C

C.4 Bowman, Mary; Calkin, Abigail B.; and Patrick A. Grant. Eating with a Spoon--How to Teach Your Multihandicapped Child. Columbus, Ohio: National Center on Educational Media and Materials for the Handicapped, Ohio State University, 1975.

COST: $3.00
Available through: Publication Sales Division
Ohio State University Press
2070 Neil Avenue
Columbus, Ohio 43210

Simply presented step-by-step.

USERS: NM, C

C.5 Butterfield, W., and R. Parson. "Use of Modeling and Shaping by Parents to Develop Chewing Behavior in a Retarded Child." Journ. of Beh. Ther. & Exp. Psy. 4:285 (1973).

USERS: M, NM, C

Copeland, Mildred; Ford, Lana; and Nancy Solon. Occupational Therapy for Mentally Retarded Children. See A12.

C.6 Crickmay, Marie C. Speech Therapy and the Bobath Approach to Cerebral Palsy. Springfield, Illinois: Charles C. Thomas, 1975.

COST: $9.50
Available through: George Road Hospital Rehabilitation Center and Veteran's Hospital
Victoria, B.C., Canada

Presents the Bobath approach from the speech therapist point of view and emphasizes teamwork. Excellent presentation of Bobath theories.

USERS: M

C.7 Ehrlich, Ann Beard. Training Therapists for Tongue Thrust Correction. Springfield, Illinois: Charles C. Thomas, 1973, 148 pp.

COST: $7.50

USERS: M

C.8 Farber, Shereen D., M.S.O.T.R. Sensorimotor Evaluation and Treatment Procedure. Bloomington: Indiana University Press, 1974.

Instructions on oral facilitation to improve feeding and speech. Use of vibration, sensory stimulation; combined techniques of Mueller, Rood, Huss, Randolph, Ayres and Knickerbocker.

USERS: M

Finnie, Nancie. Handling the Young Cerebral Palsied Child at Home. See A15.

C.9 Gardner, Wm. I. Behavior Modification in Mental Retardation: The Education and Rehabilitation of the Mentally Retarded Adolescent Adult. Chicago: Aldine-Atherton, 1971.

COST: $15.95

USERS: M, NM

C.10 Haberfellner, Hubert, and Bernt Rossiwall. "Treatment of Oral Sensorimotor Disorders in Cerebral Palsied Children: Preliminary Report." Developmental Medicine and Child Neurology 19:3 (June 1977).

For further information: Dr. H. Haberfellner
Universitats Kinderklinik
Innsbruck
Anichstrasse 35, A-6020
Innsbruck, Austria

Description of use of a modified "Monobloc" orthodontic appliance to facilitate oral habilitation. Helps to improve nasal respiration, lip closure, drooling, speech.

USERS: M

C.11 Hardy, Richard E., and J. G. Cull. Modification of Behavior of the Mentally Retarded: Applied Principles. Springfield, Illinois: Charles C. Thomas, 1975.

COST: $12.75

USERS: M, NM

C.12 Liebman, R. et al. "An Integrated Treatment for Anorexia Nervosa." American Journal Psych. 131:4 (1974), p. 432.

USERS: M

C.13 Liebman, Roberta, M.A., C.C.C. "Feeding Therapy and Speech: Some Problems of Oral-Motor Control." in Arlene Golbin, ed. Communication and Cerebral Palsy--What Parents Can Do.

Available through: Job Development Laboratory
George Washington University
Medical Center

Excellent guidance on how to feed the cerebral palsied person. Includes management of specific feeding problems such as: tongue thrust, reverse swallowing, etc.

USERS: M, NM, C

C.14 Mallik, K.; Shaver, E.; High, E.; and J. Mueller. Communication for the Developmentally Disabled: A Resource Guide for Parents and Professionals. Compiled by: The Job Development Laboratory, George Washington University, Rehabilitation Medicine, 1977, 255 pp.

COST: $6.00

A list of resources for screening, assessment, therapy, communication alternatives and devices. Includes resources for oral motor training.

USERS: M, C

C.15 Mathany, Walter K., School for Cerebral Palsied Children. "Feeding the Cerebral Palsied Child." Peapack, New Jersey.

Available through: National Society for Crippled Children & Adults

A one-page picture demonstration emphasizing that a good feeder can be the best speech therapist.

USERS: M, NM

C.16 McCrackern, Alice, M.S. O.T.R. "Drool Control and Tongue Thrust Therapy for the Mentally Retarded." American Journal of Occupational Therapy 32:2 (Feb. 1978), pp. 79-85.

A discussion of a program of evaluation and treatment for drooling and tongue thrusting using neurophysiological techniques and vibration.

USERS: M

C.17 McGill, Nancy A. "Life Project (for Group Home Operators)."

Available through: Regional Developmental Disabilities Information Center
317 Knutson Drive
Madison, Wisconsin 53704

A training kit.

USERS: NM

Mueller, Helen A. "Facilitating Feeding and Prespeech." in Physical Therapy Services in the Developmental Disabilities. See A22.

C.18 Pearlman, Ruth. Feeding Your Baby: The Safe and Healthy Way. New York: Random House, 1971, 149 pp.

COST: $8.95

Covers first feeding, breast, bottle, solids, teething, food values, kitchen equipment, preparation, and numerous recipes. Geared to normal child; but useful for handicapped. Recipes to assist in giving variety. Short section on digestive problems: diarrhea, colic, celiac disease and constipation. Easily read and understood.

USERS: M, C

C.19 Perske, Robert; Clifton, Andrew; McLean, Barbara M.; and Jean Stein, eds. Mealtime for Severely and Profoundly Handicapped Persons - New Concepts and Attitudes. University Park Press, 1977, 160 pp.
Paperback

COST: $7.95

A well illustrated book emphasizing the importance of mealtime from the point of view of parents, teachers, therapists, volunteers and handicapped persons themselves.

USERS: M, NM, C

Rood, Margaret S. "Neurophysiological Mechanisms Utilized in the Treatment of Neuromuscular Dysfunction." American Journal of Occupational Therapy 10:4 (1956). See A23.

Shafer, D. Sue; and Martha S. Moersch. Developmental Programming for Infants and Young Children. See A33.

C.20 Smith, Mary Ann Harvey, Ph.D., R.D., ed. Feeding the Handicapped Child.

COST: $3.00
Available through: Child Development Center
Department of Nutrition
711 Jefferson Avenue
Memphis, Tennessee 38105

USERS: M, NM, C

C.21 Thompson, R. J. and S. Palmer. "Treatment of Feeding Problems--A Behavioral Approach." Jour. Nutr. Educ. 6:2 (1974), p. 63.

USERS: M

Trombly, Catherine Ann, and Anna Deanne Scott. Occupational Therapy for Physical Dysfunction. See A24.

C.22 U.S. Department of H.E.W. Feeding the Child with a Handicap. Washington, D.C.: U.S. Government Printing Office, 1967, 20 pp.

COST: $ 0.40 STOCK No. 172900025

Available through: U.S.D.H.E.W. - M.C.H.S.
Superintendent of Documents
U.S. G.P.O.
Washington, D.C. 20402

Describes techniques and aids for children with special feeding and nutritional problems.

USERS: M, NM, C

C.23 Virginia State Department of Health. A Helpful Guide in the Training of a Mentally Retarded Child.

Available through: Virginia State Department of Health
Bureau of Child Health
109 Governor's Street
Richmond, Virginia

USERS: M

C.24 Williams, David L., and Elliott B. Jaffa. Ice Cream, Poker Chips, and Very Goods: A Behavior Modification Manual for Parents. 1971.
Paperback

COST: $2.75
Available through: The Maryland Book Exchange
4500 College Avenue
College Park, Maryland 20740

USERS: M, NM, C

• FEEDING TECHNIQUES AND EQUIPMENT--AUDIO-VISUAL MATERIALS

American Occupational Therapy Association. "First Things First, Occupational Therapy and the Developing Child." 16 mm color film, 15 min. See A26.

Bergen, Adrienne; Colangelo, Cheryl; and Linda Lehrer Gottlieb. "Positioning and Adaptive Equipment for Children with Central Nervous System Deficits." See B4.

C.25 Central Wisconsin Colony. "Characteristic Feeding Problems, Feeding Procedures and Techniques: Developing Feeding Skills." 1975, film, 40 min.

Available through: Library Information Center
Central Wisconsin Colony
317 Knutson Drive
Madison, Wisconsin 53704

A series of three video tapes demonstrating feeding of multiply handicapped individuals. Developed for training institutional group parents.

USERS: M, NM, C

C.26 Meyer Children's Rehabilitation Center. "Beyond Survival--Development of Feeding Skills." 1976, slide cassette.

COST: Rental--$9.00 each part; Purchase--$53.00

Available through: Meyer Children's Rehabilitation Center
Media Resource Center
University of Nebraska Medical Center
444 S. 44th Street
Omaha, Nebraska 68131

Part I. Normal Feeding Development
Part II. Proper Positioning for Feeding
Part III. Oral-Motor Development

Slide/cassette presentation of feeding. Useful for training; should be accompanied by discussion directed by a professional.

USERS: M, NM, C

C.27 Meyer Children's Rehabilitation Center. "Normal Progression of Feeding with Suggested Techniques for Correction of Pathological Conditions." 1974, slide/tape package, 15 min.

Available through: Meyer Children's Rehabilitation Center
444 S. 44th Street
Omaha, Nebraska 68131

Description of developmental stages of the oral mechanism and normal stages of feeding as well as techniques for remedying pathological patterns.

USERS: M, NM, C

C.28 Meyer Children's Rehabilitation Center. "Prerequisites for Feeding." 1972, slides and audio tape, 14 min.

COST: Purchase--$22.50
Rent --$ 7.00 (applicable toward purchase price)

Available through: Meyer Children's Rehabilitation Center
444 S. 44th Street
Omaha, Nebraska 68131

Presentation of basic feeding techniques for cerebral palsied children.

USERS: M, NM, C

C.29 Perske, Robert; Lent, James R.; and Karen Green. "Mealtime for Severely and Profoundly Handicapped Persons - New Concepts and Attitudes." University Park Press, 101 color slides and audio tape cassette. (Companion of book by the same name.) See C19.

COST: $150.00

USERS: M, NM, C

• AIDS FOR FEEDING: GUIDES AND INSTRUCTIONS

Accent on Living Buyers Guide. See G35.

C.30 Altschuler, Sherry L; Pidcoe, Susan I.; and Bernice B. Moss. "Oral Eating Device for Food Placement." American Journal of Occupational Therapy 29:4 (April 1975), p. 229.

A description of a tubular scoop with a plunger to be used in feeding, training and self-feeding for persons with tongue deficits.

Bergen, Adrienne. Selected Equipment for Pediatric Rehabilitation. See B6.

C.31 Trefler, Elaine, O.T.R.; Westmoreland, Deborah, M.A., speech pathologist; and Donna Burlingame, speech pathologist. "A Feeding Spatula for Cerebral Palsied Children." American Journal of Occupational Therapy 31:4 (April 1977).

Directions on construction of a polyethylene vacuum-formed feeding tool. The underside is flat and can be useful for "tongue walking," a technique used to decrease tongue thrust.

C.31 Feeding Spatula

C.32 Cservenyansky, Kathryn S., C.O.T.A. Inexpensive Equipment for Activities of Daily Living. George Washington University Hospital, Occupational Therapy Department, 1973, 18 pp. Illus.

COST: $1.00
Available through: Job Development Laboratory
George Washington University
Medical Center

Xeroxed manual of easily made aids for feeding, dressing, hygiene.
USERS: M, NM

Lowman, Edward, and Judith Klinger. Aids to Independent Living for the Handicapped. See B10.

Robinault, Isabel. Functional Aids for the Multihandicapped. See B12.

C.33 Weiss, Donna, and Leigh Weiss. "The Sandwich Holder." American Journal of Occupational Therapy 30:6 (July 1976) pp. 384.

Instructions for making a sandwich holder from plexiglass. The holder is designed to attach to any surface with suction cups.

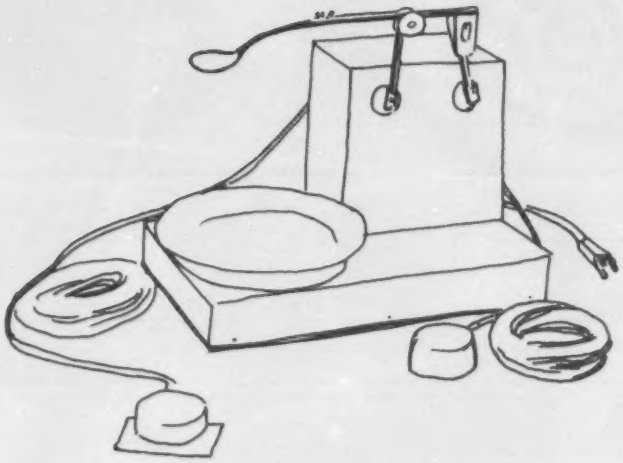
C.33 "Sandwich Holder"

• MECHANICAL FEEDERS

C.34 Beeson Automaddak Feeder
Maddak Inc.

COST: $450.00 ORDER#: 1771

Electrically driven feeder with two fluidic controls consisting of 2½" vinyl cushions. Can be controlled by any part of the body or by a head stick. One control operates the spoon which takes the food from the plate and raises it to mouth level--(must be pressed continuously for spoon to move); other control rotates plate. Spoon rises 9" above plate level. Available in 120 or 220 volt.



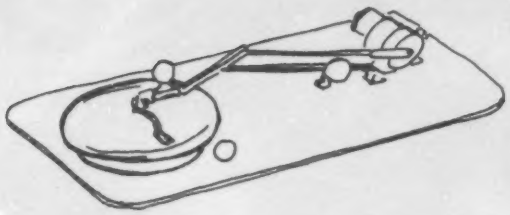
C.34 Beeson
Automaddak Feeder

C.35 Cerebral Palsy Feeder

Fred Sammons, Inc.

COST: $274.00 BK-1249 (Right hand operation)
$274.00 BK-1250 (Left hand operation)
Free instruction and criteria sheet BK-1251

A mechanical feeder developed at Ontario Crippled Children's Center available in left hand or right hand models. Enables a cerebral palsied person with some arm function to feed himself. (Send for free instruction sheet before ordering.)



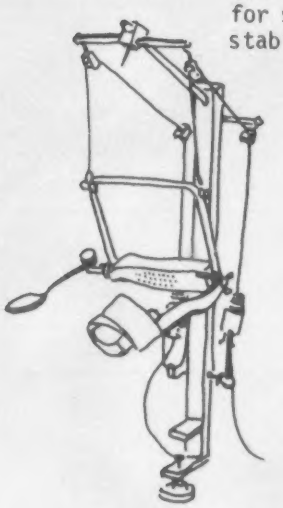
C.35 Cerebral Palsy Feeder

C.36 "The Pulley Eater"

Adaptive Therapeutic Systems, Inc.

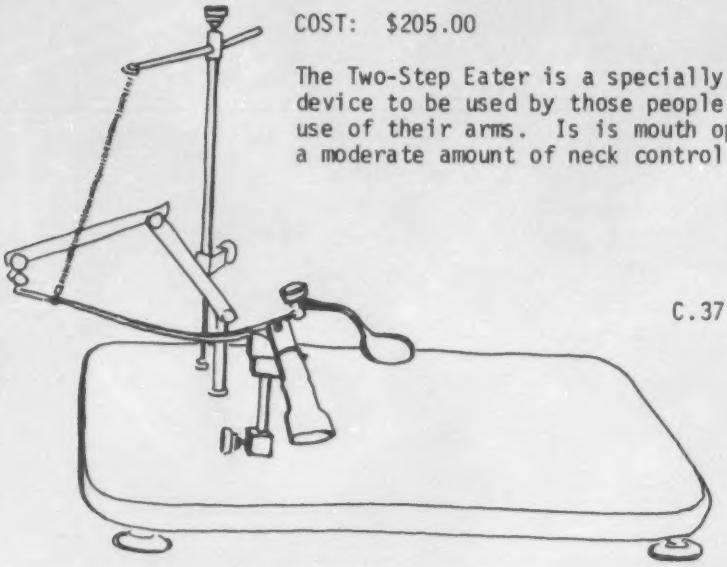
COST: $11.00

Using a system of counterbalances and an adjustable tension mechanism, the Pulley Eater eliminates the need for some basic components of eating such as grasp, stabilization of the wrist, and forearm pronation.



C.36 "The Pulley Eater"

C.37 "The Two-Step Eater"
Adaptive Therapeutic Systems, Inc.



C.37 "The Two-Step Eater"

COST: $205.00

The Two-Step Eater is a specially designed feeding device to be used by those people with limited or no use of their arms. Is is mouth operated, and requires a moderate amount of neck control.

C.38 "Spoon Lifter Feeding Device," U.S. Pat. # 3.734.306
Mr. Wm. Morewood
Winford Products, Inc.
18 Laning Avenue
Pennington, N.J. 08534

COST: $450.00 or $25.00 per month rental

Works with lever control; requires minimal strength; comes with head apparatus to scoop food and/or control lever.

C.38 "Spoon Lifter Feeding Device"

• OTHER AIDS

C.39 Infant Training Dish

Kelron Industries, Dept. p.p.
12223 Chesapeake Drive
Florissant, Missouri 63033

COST: $5.95

A feeding dish with three deep compartments that clamps to high chair or table; heat insulated, unbreakable, dishwasher safe.

C.39 Infant Training Dish

C.40 Nosey Cut-Out Glass

Fred Sammons, Inc.

COST: $1.00--Bk-1145/8 oz.
$1.25--Bk-1146/12 oz.

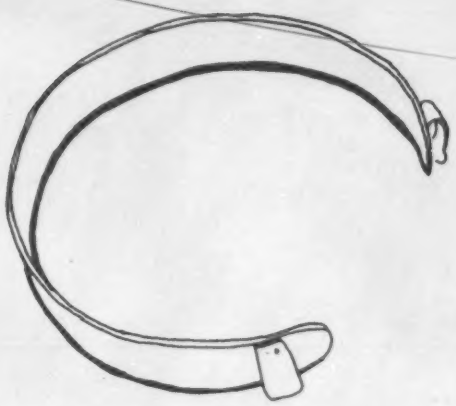
Unbreakable, boilable, plastic glass with cutout for the nose; for drinking without tipping head back.

C.40 Nosey Cut-Out Glass

C.41 Plate Guards

Fred Sammons, Inc.; Maddak; etc.

Metal or plastic piece that can be clamped to the edge of a plate to form a wall to push against when loading a spoon. See also "Scoop dish."



C.41 Plate Guards

C.42 Quad-Quip^{Tm} Sandwich Holder

Fred Sammons, Inc.

COST: $4.40 ORDER#: BK-1394

Can be attached to the table, wheelchair, or to a universal cuff.

C.42 Quad-Quip Sandwich Holder

C.43 Scoop Dish

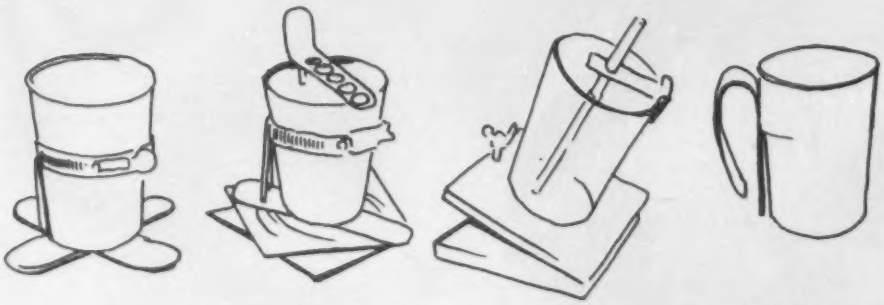
Fred Sammons, Inc.; Maddak; etc.

A dish with an overlapping rim to make it easier to load the spoon. Comes in different sizes and shapes. See also: "Plate Guards."

C.43 Scoop Dish

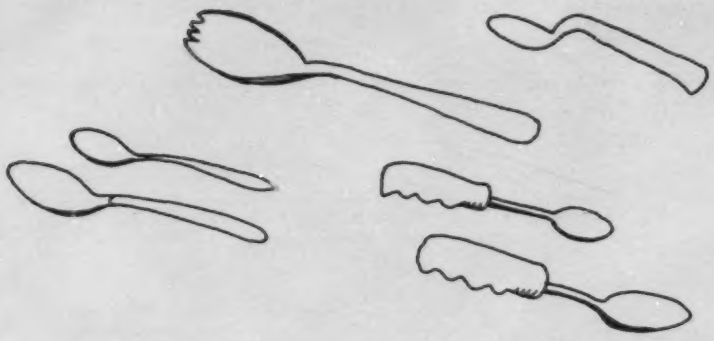
C.44 Special Cups and Glasses

Fred Sammons, Inc.; Maddak; Fashion Able; Abbey Rents; Preston; etc. See Section G: "Suppliers."



C.45 Special Spoons--built up, curved, long handled.
Fred Sammons; Maddak; Fashion Able; etc.

Special spoons to fit the needs of persons.
Available through many suppliers.



See also other references in Section B: "Equipment for Positioning."

See also Section G: "Suppliers."

• NUTRITION

C.46 Christakiss, Edward G. "Nutrition Assessment in Health Programs." American Journal of Public Health (Nov. 1973) Supp.

USERS: M

"Gaps in a Comprehensive System of Services for the Mentally Retarded." See E2.

C.47 Goodwin, Mary T., and Gerry Pollen. Creative Food Experiences for Children. 1977.
Paperback

COST: $4.50
Available through: Center for Science in the Public Interest
1779 Church Street
Washington, D.C. 20036

USERS: M, NM, C

C.48 Jacobson, Michael, Ph.D. Nutrition Scoreboard: Your Guide to Better Eating. 1975.

COST: $1.75
Available through: Center for Science in the Public Interest
1779 Church Street
Washington, D.C. 20036

USERS: M, NM, C

Krajicek, Marilyn J., ed. Detection of Developmental Problems in Children, A Reference Guide for Community Nurses and Other Health Care Professionals. See A32.

C.49 Ontario Association for the Mentally Retarded. Help Yourself to Food.

COST: $3.00
Available through: Adult Services
Ontario Association for the Mentally Retarded
1588 Bayview Avenue
Toronto, Ontario, M4387, Canada

USERS: NM, C

C.50 Safka, Denis. Nutrition and Feeding Techniques for Handicapped Children. 12 leaflets.

Available through: Nutritionist, Developmental Disabilities Program, Room 892
California Department of Health
744 P. Street
Sacramento, California 95814

USERS: M, NM, C

C.51 Smith, Mary Ann Harvey, Ph.D., R.D., ed. Guides for Nutritional Assessment of the Mentally Retarded and the Developmentally Disabled.

COST: $5.00
Available through: The Child Development Center
Department of Nutrition
University of Tennessee Center for Health Sciences
711 Jefferson Avenue
Memphis, Tennessee 38163

USERS: M

C.52 U.S.C.A. & D.H.E.W. Food Is More Than Just Something To Eat. Prepared by U.S.C.A. and D.H.E.W. with Grocery Manufacturers and the Advertising Council.

COST: Free
Available through: Nutrition
Pueblo, Colorado 81009

USERS: NM, C

C.53 Winick, Myron. "Malnutrition and the Developing Brain." in Fred Plum, ed. Brain Dysfunction in Metabolic Disorders, Research Publications Association for Research in Nervous and Mental Disease, Vol. 53. New York: Raven Press, 1974

Points out the danger of impaired brain development due to malnutrition in first two years of life. Premature infants are particularly susceptible.

USERS: M

C.54 Connors, C.K., et al. "Food Additives and Hyperkinesis: A Controlled Double-Blind Experiment." Pediatrics 58:2 (August 1976), p. 154.

USERS: M

C.55 Connors, C.K. "Food Additives and Hyperkinesis: Preliminary Report of a Double-Bind Crossover Experiment." Psychopharmacol. Bulletin 12:10 (April 1976).

USERS: M

C.56 Cook, P.S., and J.M. Woodhill. "The Feingold Dietary Treatment of the Hyperkinetic Syndrome." Med. Jour. Aust. 2:3 (July 1976), p. 85.

USERS: M

C.57 Feingold, B.F. "Hyperkinesis and Learning Disabilities Linked to Artificial Flavors and Colors." American Journal of Nursing 75:5 (May 1975), p. 797.

USERS: M

C.58 Feingold, B.F. Why Your Child is Hyperactive. New York: Random House, 1975.

COST: $7.95

USERS: NM, C

C.59 Palmer, S. "Food Additives and Hyperactivity." Clin. Pediatr. (Phil) 14:956 (October 1975).

USERS: M

C.60 Smith, Lendon H. Improving Your Child's Behavior Chemistry: A New Way to Raise Happier Children into Healthier Adults. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1976, 222 pp.

COST: $7.95

Purpose of book is "to identify those children who are at risk and help them change before bad behavior gets fixed as a way of life." Features checklists for vulnerability and stages where problems arise, and details a range of available remedies: diet, vitamin therapy, counseling, medication and parent-teacher strategies.

USERS: M, NM, C

Drug-Nutrition Interaction

C.61 "The Growth of Children Given Stimulant Drugs." Nutr. Rev. 31:91 (March 1973).

USERS: M

C.62 Eastham, R.D., et al. "Red Cell Folate and Macrocytosis During Long-Term Anticonvulsant Therapy in Non-Anaemic Mentally Retarded Epileptics." Brit. Psych. 126:263 (1975).

USERS: M

C.63 Gross, M.D. "Growth of Hyperkinetic Children Taking Methylpenidate Dextroamphetamine, or Imprmine/Deserpramine." Pediatrics 58:3 (September 1976), p. 423.

USERS: M

C.64 Rose, Daphne A. Drug Induced Nutritional Deficiencies. Westport, Connecticut: The Avi Publishing Co., Inc., 1976.

COST: $19.00

USERS: M

C.65 Safer, D.J., et al. "Growth Rebound After Termination of Stimulant Drugs." Jour. Pediatr. 86:113 (January 1975).

USERS: M

C.66 Share, J.B. "Review of Drug Treatment of Down's Syndrome Persons." Am. Jour. Ment. Defic. 80:388 (1976).

USERS: M, C

C.67 Springer, N.S. and N.L. Fricke. "Nutrition and Drug Therapy for Persons with Developmental Disabilities." Am. Jour. Ment. Defic. 80:317 (1975).

USERS: M, C

Nutrition Games

C.68 "Yummy Rummy"

American School Food Service Association
4101 East Illiff
Denver, Colorado 80222

(1970)
A game about balanced diets.

USERS: NM, C

C.69 "Soup's On"

Didactron, Inc.
P.O. Box 1501
Ann Arbor, Michigan 48106

(1970)
A balanced diet bingo game.

USERS: NM, C

C.70 "Super Sandwich-Funny Food Game"

David C. Cook Publishing Company
School Products Division
Elgin, Illinois 60120

COST: $12.95 #84483

A bingo game to teach basic nutrition.

USERS: NM, C

Liquid Lunch Ideas

C.71 "Sustacal" (Mead-Johnson)
Available in drug stores; is contraindicated if person has kidney problems. To balance meal, follow with juice such as pineapple, apricot, apple, orange. Take into account the number of calories needed per meal for quantity to give. Should be chilled to be palatable.

C.72 "Cutter's Formula 2" (for tube feeding)
Comes in jars; orangy flavor. Full meal pureed together. Get from drug store, or may have to order.

C.73 "Ensure" (for tube feeding)
Walnut flavor. Order through a drug store.

C.74 "Nutrament" (food supplement)
Does not have as much nutrition as "Sustacal" but okay to use along with other foods. Check with physician. It is available in many flavors in food stores.

C.75 Other ideas: banana milk shakes, cream soups, eggnog, yogurt.

D. DRESSING

The ability to dress and undress is often the next self-care skill learned after feeding. Because there are so many things to attend to during the day, it is often easier and quicker for the mother or direct care personnel to help or completely dress and undress the cerebral palsied child. "The child has so much to struggle with at school," or "There isn't enough time," or "He's handicapped and can't dress himself," are common excuses. Once established, this custom becomes hard to break. The handicapped child often does not initiate dressing or undressing as does the normal child, even though many can learn. Starting with the simplest tasks of removing clothes and progressing to the more difficult dressing and fastening tasks, if taught with patience and positive reinforcement, the mildly to moderately involved cerebral palsied person can become independent in this area. The more severely disabled person may only learn to take off his coat or socks; however, many severely involved cerebral palsied persons are able to do a considerable amount for themselves using a variety of special techniques and aids.

- TEHCNIQUES

The most important factor in the matter of dressing appears to be the attitude of the family towards the cerebral palsied person's attempts at independence. Extra time should be allowed in the morning if the child is to get himself ready for school. Many parents find it difficult watching their child struggle and jump in to help; they may have to learn to "sit on their hands" or actually hold their hands behind their backs to keep from helping too soon. Of course, the child should not be left to struggle to the point of frustration. The parent will have to learn to judge when and how to help physically or with verbal encouragement.

An occupational therapist is an excellent resource person to guide the parents in special techniques of dressing the cerebral palsied child. However, when professional help is unavailable, parents can benefit from the excellent step-by-step instructions in an article written in 1954 in the American Journal of Occupational Therapy: "Dressing Techniques for the Cerebral Palsied Child" (D1). Nancie Finnie's book (A15) also has good guidelines which emphasize positioning and balance while learning. Occupational Therapy for Mentally Retarded Children (A12) and Occuaptional Therapy for Physical Dysfunction (A24) both have good guides on how to break down each dressing activity into steps, so that the child gradually gains proficiency in what for him is a difficult motor planning task. Occupational Therapy for Mentally Retarded Children was written for occupational therapy aides, but is good for parents as well. Other sources of guidance are Help Them Grow (A37) and Developmental Programming for Infants and Young Children (A33). For guidance in the complicated tasks of fastenings

refer to the article "Dressing Techniques for the Cerebral Palsied Child, Part II, Fastenings" (D2).

- AIDS

To facilitate learning, care should be taken in the type of clothing chosen for the child or adult. Many fashionable styles are very easy to manage--stretch slack, pullover shirts, wraparound dresses and skirts. Also there are many possibilities for adapting clothing: using Velcro (available in sewing supply stores) instead of buttons, hooks or buckles; putting rings on zippers; reinforcing seams that get extra stress, etc. Self Help Clothing for Handicapped Children (D3) and Convenience Clothing and Closures (D10) describe appropriate clothing and making alterations.

Many aids, some commercially available and others easily made at home, have been devised to assist handicapped persons in dressing. For suggestions, see Functional Aids for the Multiply Handicapped (B12) and Aids to Independent Living (B10). Commercially available aids can be procured through Fred Sammons (G27), Maddak (G18), Fashion Able (G10) and several of the medical supply companies cited in the general resource list at the end of this manual. Fashion Able also offers special clothing as do Handee for You (D5) Fairway King (D4). Refer to other resources at the end of this chapter.

D. REFERENCES—DRESSING

- DRESSING TECHNIQUES

D.1 American Occupational Therapy Association. "Dressing Techniques for the Cerebral Palsied Child." American Journal of Occupational Therapy 8:1 (Jan.-Feb. 1954).

Available through: American Occupational Therapy Association

Basic step-by-step dressing techniques still taught to cerebral palsied children, though it was written over 20 years ago.

USERS: M, NM, C

D.2 American Occupational Therapy Association. "Dressing Techniques for the Cerebral Palsied Child, Part II, Fastenings." American Journal of Occupational Therapy 8:2 (March-April 1954).

Available through: American Occupational Therapy Association

Basic methods in teaching the use of bows, buttons, buckles and lacing. Includes adaptations and teaching aids.

USERS: M, NM, C

Blumenfeld, Jane; Thompson, Pearl E.; and Beverly S. Vogel. Help Them Grow. See A37.

Copeland, Mildred; Ford, Lana; and Nancy Solon. Occupational Therapy for Mentally Retarded Children. See A12.

Finnie, Nancie R. Handling the Young Cerebral Palsied Child at Home. See A15.

Schafer, D. Sue, and Martha S. Moersch. Developmental Programming for Infants and Young Children. See A33.

Trombly, Catherine, and Anna Deanne Scott. Occupational Therapy for Physical Dysfunction. See A24.

• DRESSING AIDS AND ADAPTED CLOTHING

Abbey Medical.
See G1.

D.3 Bare, Clari, O.T.R.: Boettke, Eleanor, M.S.: and Neva Waggoner, M.A.
Self-Help Clothing for Handicapped Children. 1962, 78 pp.
Paperback

Available through: National Society for Crippled Children and Adults

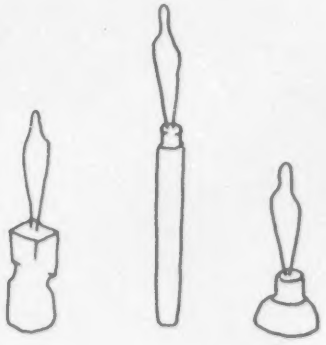
A guide to choosing appropriate clothing and making adaptations. Still valid although old.

D.4 Fairway King
3 East Main Street
Oklahoma City, Oklahoma 73104

Adapted clothing.

Fashion Able
Adapted clothing, dressing aids.
See G10.

Fred Sammons, Inc.
Dressing aids and materials to make adaptations.
See G27.



Button Aids

D.5 Handee for you

7674 G. Park Avenue
Lowville, New York 13367
(315) 376-7020

Suppliers of adapted clothing: dresses, shirts, tops, jackets, pockets, aprons and scarves.

D.6 Hausmann Industries

Multipurpose Utility Stick ORDER#: 5075

Aluminum master shaft 24" long with wrist strap to which may be attached any of the following devices: shoe horn, comb, magnet, reaching hook, bath sponge, grasping clip.

The Independence Factory

Inexpensive dressing aids.
See G13.

D.7 Job Development Laboratory

Sock Aid

Instructions available through:
Job Development Laboratory
George Washington University
Medical Center

This is molded from Rolyan Polyform and holds its shape better than one made from a plastic bottle.

D.7 Sock Aids

Lowman, Edward, and Judith L. Klinger. Aids to Independent Living.
See B10.

Maddak, Inc.

Dressing aids.
See G18.

Medical Equipment Distributors, Inc.

Dressing aids.
See G19.

D.8 Meyer, Rose. "The Sock Aid." American Journal of Occupational Therapy 29:4 (April 1975).

A description of an aid designed for the stroke patient. Could be useful for cerebral palsied hemiplegics. The aid is made from a 2" x 11" strip of Orthoplast shaped around the foot.

D.8 "The Sock Aid"

G. E. Miller, Inc.
Dressing aids.
See G20.

D.9 Nelson Medical Products
5690-G Sarah Avenue
Sarasota, Florida 33581

Suppliers of adapted clothing.

J. A. Preston Co.
Dressing aids.
See G24.

Robinault, Isabel P. Functional Aids for the Multiply Handicapped.
See B12.

D.10 Talon Educational Service. Convenience Clothing and Closures.

Available through: Talon Educational Service
1777 Boston Post Road
Milford, Connecticut 06460

Booklet with ideas for using zippers and Velcro to make dressing easier.

D.11 Vocational Guidance and Rehabilitation Services. People Helping People: Clothing and Aids for the Physically Disabled. Catalog. Illus.

COST: $1.00
Available through: Ms. Mary Ann Lomax
Sewing Department
VGRS
2239 East 55th Street
Cleveland, Ohio 44103

A pictorial catalog showing the design and special features of clothing and aids available through VGRS.

See also: Publications listed in Section G.

E. HYGIENE

- DENTAL CARE

In Mental Retardation (April 1977, Vol. 15, No. 2), an official publication of the American Associations on Mental Deficiency, is an article entitled "Gaps in a Comprehensive System of Service for the Mentally Retarded" (E2) which points out that dental care for the mentally retarded, especially the severely disabled, has been grossly neglected. It is often quite difficult to brush the teeth of a person with poor motor control: he may gag or bite down on the toothbrush; his tongue may get in the way; he may swallow the toothpaste. All these things make toothbrushing a time-consuming chore, but lack of proper dental care affects the person's entire health. Unattended cavities may cause pain and result in poor eating. If many teeth have to be pulled, the whole mouth structure is affected; then, not only nutrition but also speech can be affected.

In an attempt to attack this serious problem of poor dental health, the National Foundation of Dentistry for the Handicapped (E1) is waging a "Campaign of Concern" to provide comprehensive dental care for handicapped persons of all ages. They are developing audiovisual materials that can be used to instruct dentists and auxiliary personnel in dealing with developmentally disabled patients.

The National Easter Seal Society publishes a booklet entitled Helping Handicapped Persons Clean Their Teeth (E6) as well as a manual of home dental care, Toothbrushing and Flossing (E4). United Cerebral Palsy of New York City, Inc. circulates the booklet Dental Care for Adult Patients with Cerebral Palsy (E7). These publications and an article in the Journal of Applied Behavior Analyses, "Training Mentally Retarded Adolescents to Brush Their Teeth" (E3), can serve as guides for parents and institution direct care personnel in techniques for use with this special group of people.

An electric toothbrush can be useful for the cerebral palsied person, for it gives food stimulation to the gums that the poorly coordinated person may find impossible to do adequately with an ordinary toothbrush. A Water-Pick or Aqua-Sweep (E8) can also help to massage the gums and clean hard-to-reach spots. Many handicapped persons can use these aids themselves. The simple adaptation of a built-up handle may make it possible for the cerebral palsied person to handle the slippery toothbrush. Such an adaptation can be done with a foam curler or a splinting material like Rolyan Polyform (G26) or ordered through one of the suppliers of self-help aids listed in Section G.

• BATHING

A number of aids--long handled sponges, bath mits, hand showers, a variety of tub seats and grab bars--are available to help the cerebral palsied person with bathing. Most of the suppliers offer these. Sometimes because of deformities or severely abnormal postures, a client will need special positioning in the tub or shower to protect him from accidents. "The Supporta Bather" (E22) may be useful in these cases. Other ideas, such as the use of inflatable pillows or a bucket seat made from a plastic laundry basket, may be found in Functional Aids for the Multiply Handicapped (B12) and Aids to Independent Living (B10). Also, one should look into aids on the open market to help the handicapped handle the soap: for example, shower soap on a string or liquid soap dispensers that can be attached to the wall.

As the child gets bigger, he may become more difficult to transfer to the tub. At this point it may become necessary to consider using a lift (E12) (E13) (E16) to assist with transfers. These lifts are expensive and cumbersome, but may be the only solution for the cerebral palsied person to continue to have tub baths or showers. This emphasizes the need to teach the cerebral palsied child to assist with transfers even when he is still small enough to lift. The physical health and strength of the handler, perhaps an aging parent, must be considered in planning the aids to be used.

• TOILETING

In order for the handicapped person to function in a vocational setting, he must have solved any toileting problems he may have had. The first step, of course, is toilet training. A book entitled Toilet Training the Retarded (E5) gives instructions on the Foxx-Heisman method of toilet training. This method can be used in conjunction with a bio-feedback device called the Panty Alert (E30).

For the person who does not sit alone, there are a number of special toilet seats available or that can be constructed to give secure support (B6) (B9) (E33) (E34) (E35). Also, several different training seats for the small child that are either placed over the toilet or sit independently on the floor are available on the open market. It is hoped that the child can learn to transfer to the toilet from a wheelchair if he is not ambulatory. However, if this does not prove possible, some alternate method of toileting must be found for the person to become competitively employed. One alternative is the use of a urinal. Male urinals are available through any medical supply or drug store. Fashion Able makes a female urinal for wheelchair use (E25), or one can be made from a Dynamo detergent bottle (E27). For the woman in braces who finds it difficult to unlock and lock them and to transfer to the toilet, Maddak makes a urine trough (E32) to be used while standing. (A solution found for one severely athetoid man who had no control of his arms and hands, but good use of his feet, was the implementation of "The Angleo System"--a male catheter, connected tubing and a drain clamp (E31). The tubing is secured to his leg with a Velcro strap which he

can loosen with his toes. He opens the clamp, aims the tubing into the toilet or urinal, urinates, closes the clamp, shakes the drops off the tubing and tightens the strap all with his feet. He now is independent in toileting during the daytime and thus can be considered for competitive employment.) Every effort should be made to make the handicapped person independent in this area. It is usually possible to get a coworker to help set up one's lunch, but it is not often that one would find a coworker willing to help with this personal problem.

Of course, the woman has the added difficulty of coping with her monthly periods. The new no-belt sanitary napkins make this problem easier to solve, and some women can learn to manage tampons. Sometimes sanitary pants with elastic strips help to keep the pad in place.

- PROTECTIVE AIDS

Helmets

The severely disabled child sho has frequent unpredictable seizures is in constant danger of hitting his head when falling and causing a concussion or lacerations. The helmets most commonly used for head protection do not protect the face of the child. However, Cooper (E39) has now developed a hockey helmet with a face guard that is lightweight and gives good head and face protection.

The older child, adolescent or adult who needs head protection and is self-conscious about wearing a helmet can use the aid being developed by the Job Development Laboratory at George Washington University Medical Center (E38). This helmet can be worn under a wig, turban, stocking cap or other hat and is totally camouflaged. Of course, it does not give face protection. Other commonly used protective helmets are available through Abbey Medical (G1), Preston (G24), G. E. Miller (G20), and Rehab Med (G25).

Handguards

Another protective aid developed by the Job Development Laboratory is a pair of hand guards for the self-abusive child who bites his hands and wrists. There are two sets of guards made from Rolyan Polyform (G26) with plastic hinges at the wrists--one set with fingers exposed to be worn under direct supervision, and one set that completely covers the hands and fingers. For further information and isntructions for their construction write the Job Development Laboratory (G57).

Identification

Another protective aid that should be considered is an identification bracelet or dog tag that not only gives the name and address of the disabled person, but also any drug allergies or other medical information--e.g., diabetes, allergy to bee stings, epilepsy--that should be known in case of an accident. The Medic Alert Foundation supplies these (E42).

E. REFERENCES--HYGIENE

- HYGIENE TECHNIQUES

E.1 "Campaign will Help Provide Comprehensive Dental Care." Mental Retardation News (May-June, 1977).

Available through: National Foundation of Dentistry for the Handicapped
1211 Broadway, Suite 5
Boulder, Colorado
ATTN: Fred Leviton,
Public Affairs Coordinator

Waging a "campaign of concern" to provide comprehensive dental care to handicapped persons of all ages. Developing audiovisual presentations to instruct dentists and auxiliary personnel in the nature of developmental disabilities. HEW Developmental Disabilities Grant to establish model coordinating committees in 10 cities. See Dental Guidance Council for Cerebral Palsy (G53).

USERS: M, NM, C

E.2 "Gaps in a Comprehensive System of Services for the Mentally Retarded." Mental Retardation 15:2 (April, 1977), pp. 6.

Dental care, nutrition and communication.

USERS: M, NM, C

E.3 "Training Mentally Retarded Adolescents to Brush Their Teeth." Journal of Applied Behavior Analysis 8:30 (1975).

USERS: M, NM, C

Blumenfeld, Jane; Thompson, Pearl E.; and Beverly S. Vogel. Help Them Grow: A Pictorial Handbook for Parents of Handicapped Children. See A37.

E.4 Casamassino, Paul, D.D.S. Toothbrushing and Flossing: A Manual of Home Dental Care for Persons who are Handicapped. 1977, 20 pp.

COST: $1.50

Available through: National Easter Seal Soceity for Crippled Children & Adults

An illustrated booklet of techniques, aids and adaptations for dental care.

USERS: M, NM, C

Copeland, Mildred; Ford, Lana; and Nancy Solon. Occupational Therapy for Mentally Retarded Children. See A12.

Finnie, Nancie R. Handling the Young Cerebral Palsied Child at Home. See A15.

E.5 Foxx, Richard, and Nathan Azrin. Toilet Training the Retarded: A Rapid Program for Day and Nighttime Independent Training. Champagne, Illinois: Research Press, 1973. Illus. Paperback

COST: $6.95--including program forms;
$5.00--manual only

Available through: Research Press
Box 3177
Champagne, Illinois 61820
(217) 352-3273

Presents the Foxx-Heisman method of toilet training using biofeedback.

USERS: M, NM, C

E.6 Nowark, Arthur J., D.M.D. Helping Handicapped Persons Clean Their Teeth. 1977. One-page leaflet.

COST: $ 0.15
Available through: National Easter Seal Society for Crippled Children & Adults

Steps and principles of dental hygiene that can be applied to help persons unable to clean their teeth themselves.

USERS: M, NM, C

E.7 Rosenstein, Solomon N., and Marvin B. King. Dental Care for Adult Patients with Cerebral Palsy. 1973, 28 pp. Illus.

COST: $1.00
Available through: United Cerebral Palsy of New York City, Inc.
339 East 44th Street
New York, New York 10017

Case histories are presented to illustrate principles of dental treatment for adult patients. These principles form the basis of training and service activities of the Cerebral Palsy Dental Program at Columbia University.

USERS: M, NM, C

Redbook's Parent and Child.
See A53.

Shafer, D. Sue, and Martha S. Moersch. Developmental Programming for Infants and Young Children.
See A33.

Trombly, Catherine Ann, and Anna Deanne Scott. Occupational Therapy for Physical Dysfunction.
See A24.

• AIDS

Accent on Living Buyer's Guide.
See G35.

Aids to the Handicapped.
See F18.

Lowman, Edward and Judith Klinger. Aids to Independent Living.
See B10.

ISAARE. See G42.

Robinault, Isabel P. Functional Aids for the Multiply Handicapped.
See B12.

Dental Care

E.8 Aqua-Sweep

COST: $17.99
Available through: People's Drug Stores
Washington, D.C. area

Pulsing water dental care unit; attaches to faucet (fitting included).

Tub Chairs and Lifts

Achiever™ Seat.
See B15.

E.9 Baby Anchor - Infant Bath Seat
The Wallace, Davis Co.
P.O. Box 4308
Hamden, Connecticut 06518

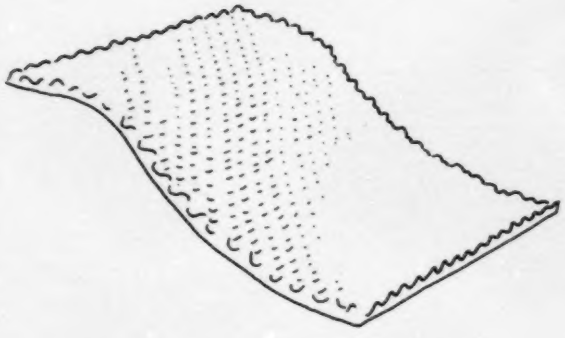
COST: $5.00 Deluxe Model

E.10 Bath Mattress

Joan Cook (catalog)

COST: $9.95

One-inch thick polythylene foam pad - 20" x 36".
Won't mildew or retain odors, squeezes dry like a sponge, machine washable.



E.10 Bath Mattress

E.11 Grab bars, tub seats, hand shower
Lumex, Inc.
Fred Sammons, Inc.
J. A. Preston

E.12 Hoyer Patient Lifters
Ted Hoyer and Co., Inc.
222 Minnesota Street
Oshkosh, Wisconsin 54901

COST: Approx. $420.00

Available through: Everest and Jennings, Inc.

Hoyer manufactures a variety of lifts for bed, car or tub transfers. Various seats and slings are available to accomodate different disabilities.

E.12 Hoyer Patient Lifters

E.13 Hydraulic Bath Lift
Ted Hoyer and Co., Inc.

E.14 Inflatable Bathtub

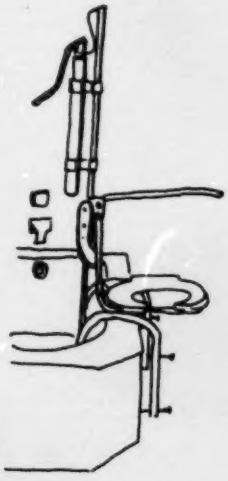
Bathing Aids to the Handicapped
P.O. Box 1956
Greeley, Colorado 80631
(303) 353-8378

Portable inflatable tub that is placed on a bed. Water is pumped in and out.

E.14 Inflatable Bathtub

E.15 Invacare Portable Hydraulic Tub Seat

Invacare Corporation



E.15 Invacare Portable Hydraulic Tub Seat

E.16 Lift-Aid LAT - L # 210

Trans-Aid Corp.

COST: Approx. $400.00

A patient lifting aid with wraparound sling. Makes transfers easy with one attendant. It is narrow, goes through doorways, is good for bathtub, bed and car transfers.

E.17 MED Bath Chair

Medical Equipment Distributors, Inc.

COST: $118.00 ORDER# M04-0034

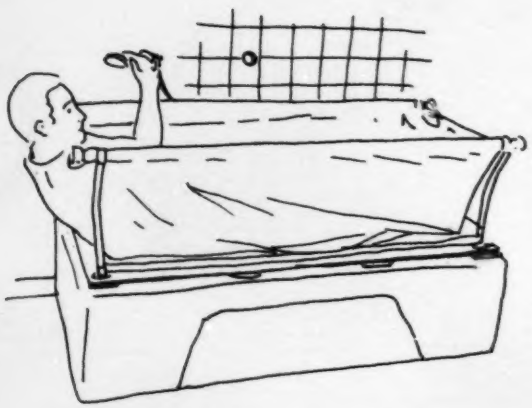
Folding, padded seat and back--10½" high, 16" x 16" seat with 6½" x 8" opening in seat; removable arms.

E.18 MED/OB Tub-ON-Tub

Medical Equipment Distributors, Inc.

COST: $145.00

A Swedish bath unit of heavy-duty vinyl that sits on top of a bathtub to be used with a hand shower. Side lets down for easy transfer from a wheelchair. Height makes it easy for an attendant to assist the bather.



E.18 MED/OB Tub-ON-Tub

E.19 Nolan Bath Chairs

J. E. Nolan and Son, Inc.
P.O. Box 22181
Louisville, Kentucky 40222

Water-powered tub chair, lifts up to 300 lbs.; choice of two types of seats with arm rests. Portable, lightweight, self or attendant operated. Similar to Invacare portable hydraulic lift.

E.19 Nolan Bath Chairs

E.20 Oltmann Bath Aide

Bath-Aide Co.
571 Franklin Avenue
Massapequa, Long Island, New York 11758

See: Aids to Independent Living (B10).

COST: $30.00-$35.00

Junior and senior sizes. Aluminum tubing frame with vinyl plastic hammock will support up to 300 lbs. Foam rubber headrest and suction cups on base.

E.20 Oltmann Bath Aide

E.21 Portable Hydraulic Bath Lift
J. A. Preston

COST: Approx. $475.00 ORDER#: PC 7190

Utilizes normal water pressure from the top to operate the hydraulic cylinder Weighs 26 lbs. Similar to Invacare hydraulic lift.

E.22 The Supporta Bather™
Rehab Med, Rehabilitation Equipment, Inc.

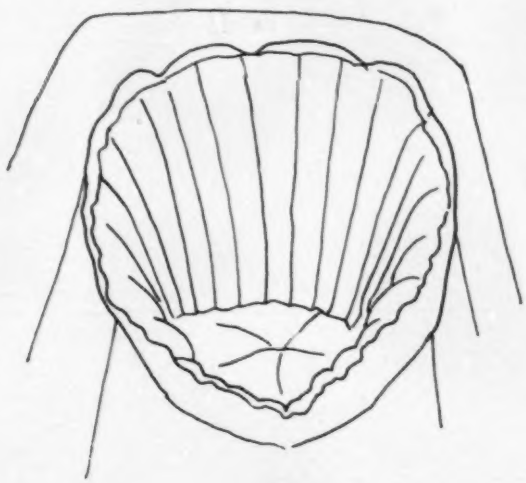
A lightwieght bathing, feeding, and positioning aids. Bucket sling reduces extensor thrust. Will hold weights up to 175 lbs. Made of aluminum tubing with nonabsorbent waterproof duck sling. Over-sized suction cups prevent sliding in any tub.

E.22 The Supporta Bather™

E.23 Suzy Air Chair - Spastic Society
12 Park Crescent
London W1, England

COST: Approx. $8.00

Inflatable "chair" provides support in tub.



E.23 Suzy Air Chair

Bathing Aids

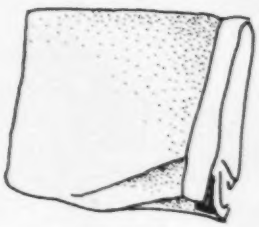
E.24 No-Rinse Shampoo

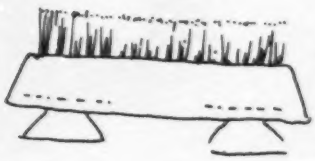
N/R Laboratories Inc.

A shampoo that is applied and then wiped dry. It requires no rinsing.

E.25 Bath mits, long handled sponges, suction cup nail brushes, bathing need caddies.

See section G: "Suppliers of Aids and Equipment."





Toileting Aids

E.26 Female Urinal

Fashion Able

COST: $3.49 ORDER#: 4080

Anatomically contoured for proper fit. Sturdy molded plastic, boilable. For use when sitting or lying. 6" high, 10" long with handle.

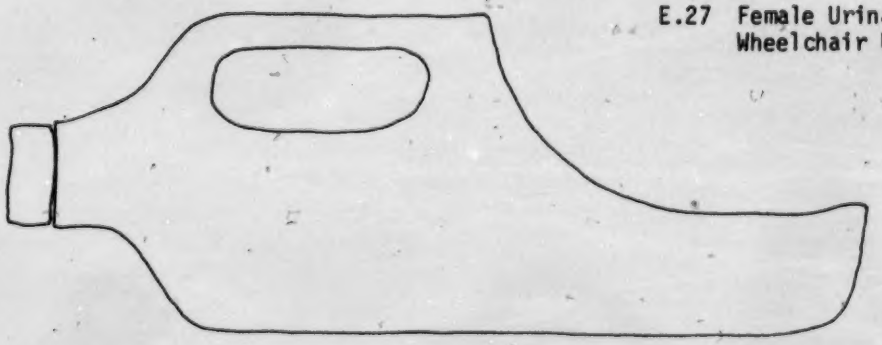
E.26 Female Urinal

E.27 Female Urinal for Wheelchair Use

Devised by: James Mueller, B.I.D., and
Elizabeth C. High, O.T.R.

Instructions available through:
Job Development Laboratory
George Washington University
Medical Center

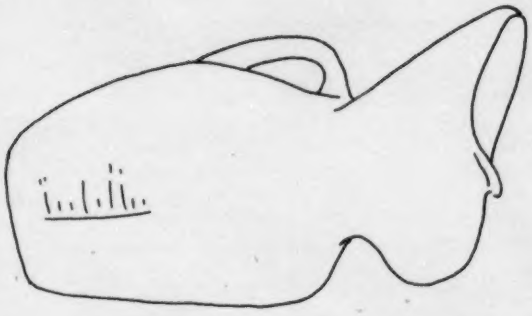
Easily made from an economy sized "Dynamo" liquid detergent bottle.



E.27 Female Urinal for Wheelchair Use

E.28 Guardian Invalid-Eze Female Urinal
Guardian Products Co., Inc.

Autoclavable, unbreakable; for use on back in bed, not for sitting up. If not available in local hospital supply, order through the manufacturer.



E.28 Guardian Invalid-Eze Female Urinal

E.29 Incontinence Aids

Available through: Local drugstores and surgical supply houses. Plastic pants with disposable or washable liners.

E.30 Panty-Alert and Potty Alert
Tech. Serv.
5301 Holland Dr.
Beltsville, Maryland 20725

Biofeedback device for toilet training used in conjunction with Foxx-Heisman toilet training program.

E.31 "The Angelo System"
Uro Sheath External Catheter

COST: Approx. $5.00

Reusable catheter with rubber buttonhole strap and Bard connecting tubing. Available in local surgical supply houses that carry Bard products.

Uro-Pro Internal Clip Drain Clamp ORDER#: 9600
Internal Associates, Inc.
Waneque, New Jersey 17465
(201) 839-5998

---OR---
Plastic Urinary Clamp

COST: Pkg. of 12 @ $2.40 ORDER#: BK-6013
Available through: Fred Sammons, Inc.

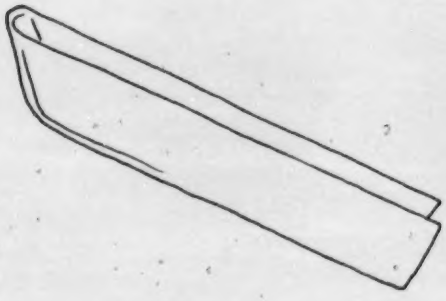
For further information write:
The Job Development Laboratory
George Washington University
Medical Center

A system employed for daytime independence in urination for men with no functional arm use. See p.94 of text for explanation.

E.32 Urine Trough for Women
Maddak, Inc.

COST: $3.00 ORDER#: F3124

12" x 2½" deep x 1½" wide plastic trough closed on one end which permits women to urinate while in a standing position.

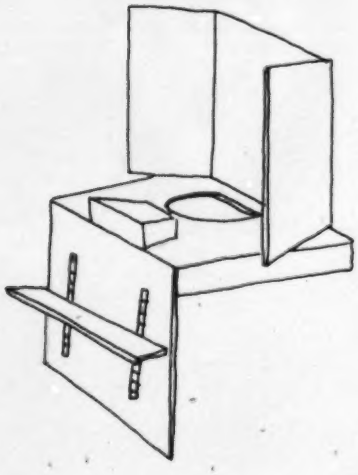


E.32 Urine Trough for Women

Toilet Seats

E.33 Adaptive Toilet Seat
Children's Rehabilitation Center
Charlottesville, Virginia

Easily constructed toilet seat to fit over a normal commode.

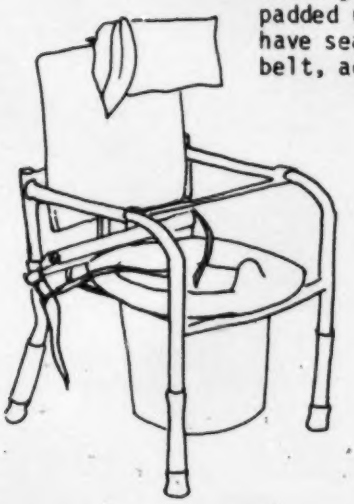


Bergen, Adrienne; Colangelo, Cheryl; and Linda Lehrer Gottlieb. "Positioning and Adaptive Equipment for Children with Nervous System Deficits." See B4.

Bergen, Adrienne. Selected Equipment for Pediatric Rehabilitation. See B6.

E.34 Child Safety Posture Commode
Invacare Corp.

A training commode designed for the handicapped child; has adjustable legs, safety bar, legs angled for stability, padded upholstered adjustable backrest and headrest. Can have seat reducer ring with urine deflector, nylon seat belt, adjustable footrests.



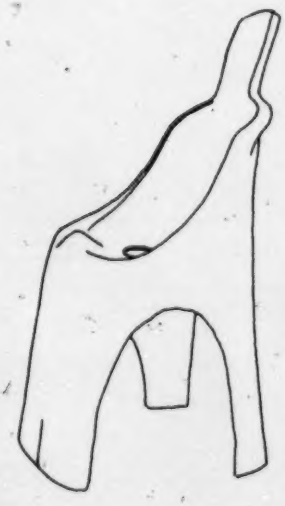
E.34 Child Safety Posture Commode

Hofmann, Ruth B. How to Build Special Furniture and Equipment for Handicapped Children. See B9.

E.35 Maddak Children's Toilet Aid
Maddak, Inc.

COST: $340.00 ORDER#: T3178

A molded fiberglass reinforced plastic seat that fits over the toilet with legs that give a firm base and high curved back for stability.



E.35 Maddak Children's Toilet Aid

E.36 Safety Posture Commode for the Disabled Child
Medical Equipment Distributor, Inc.

COST: $180.00 ORDER#: M03-0139 Med

Adjustable legs (13"-17"), pail and safety bar, washable. Available with adjustable padded backrest and headrest, 6½" diameter ring-reducer, soft fabric safety belt. Similar to Child Safety Posture Commode (see E33).

• PROTECTIVE AIDS

Helmets

E.37 The Adapta Helmet
Rehab Med, Rehabilitation Equipment, Inc.

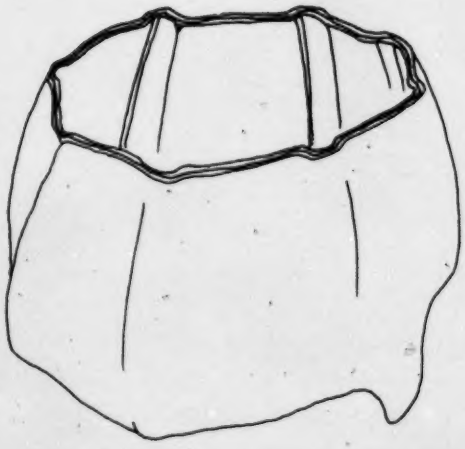
Constructed of polyethylene with foam padding. Fully adjustable. Head size 18"-26"; optional chin and mouth protector.

E.37 The Adapta Helmet

E.38 Concealed Head Protection

Designed by: James Mueller, B.I.D.
Job Development Laboratory
George Washington University
Medical Center

Instructions available for custom-making a helmet to be worn under a wig, turban or hat. Fabricated from high-density polyethylene foam using Temper Foam Brand polyurethane-silicone foam as a shock absorber. Vacuum-forming facilities are required for molding. The helmet gives a high degree of shock resistance. Weighs about 5 ozs.



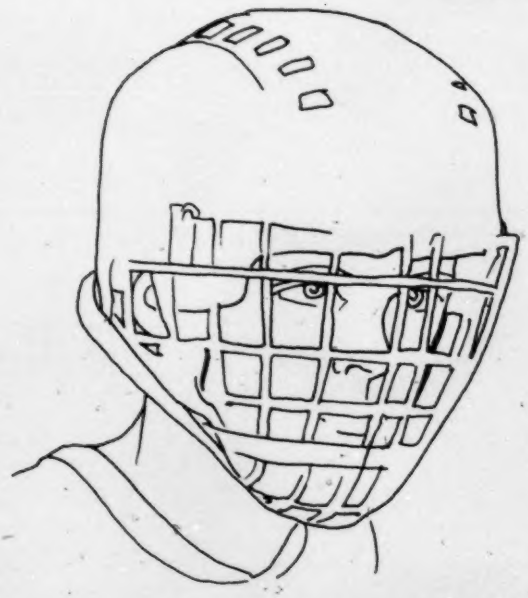
E.38 Concealed Head Protection

E.39 Cooper Hockey Helmets

COST: Approx. $45.00 ORDER#: SK600 Jr.
HM50 Jr.

Available through: sporting goods stores.

Gives full head and face protection for children who fall frequently from unpredictable seizures, ataxia or athetosis, etc.



E.39 Cooper Hockey Helmets

Other head protection
See Section G: Suppliers of Aids and Equipment.

Other Protective Aids

E.40 BITE

Halbrand, Inc.
Mfg. of Hospital Disposables
4413 Industrial Parkway
Willoughby, Ohio 44094

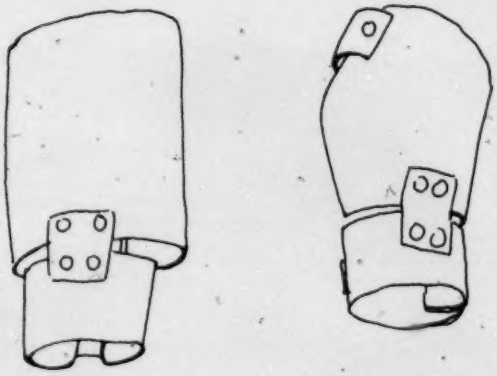
A tongue depresser with a 3" firm foam end; individually packed in sterile plastic bag for oral control during epileptic seizures.

E.41 Hand Guards

For instructions contact:
Elizabeth C. High, O.T.R.
Job Development Laboratory
George Washington University
Medical Center

COST OF MATERIALS: Approx. $10.00

Hinged hand and wrist protection molded from Rolyan. See text for explanation.



E.41 Hand Guards

E.42 Emergency Medical Identification

Medic Alert Foundation
Turlock, California 95380

Identification bracelets or cards that supply medical information about the bearer that could prevent serious complications or death in case of an accident or other medical emergency.

F. HOUSEHOLD AND COMMUNITY INVOLVEMENT

An extension of a person's self-care ability is his participation in daily household chores. As we mentioned above, every member of the household should be expected to have some household duties (unless he is so disabled and profoundly retarded that he is unable to comprehend or move at all). The easiest task for the person to start with is that of wiping off his own eating surface after meals; even the severely physically involved cerebral palsied child can make an attempt at this. From this small beginning the child can proceed at his own pace to become involved in and helpful with household responsibilities.

• HOUSEHOLD AIDS

For the less physically involved person, there are many aids to help with household tasks. The publications Aids to Idependent Living (B10), Functional Aids for the Multiply Handicapped (B12), Adaptations and Techniques for the Disabled Homemaker (F14), Do It Yourself (F11) and Aids to the Handicapped (F18) all give helpful ideas for aids and adaptive devices to make it possible for handicapped persons to do housework. A film developed by the Institute of Rehabilitation Medicine in New York City, "The Homemaker with Incoordination" (F15), shows a cerebral palsied homemaker doing household activities and might be useful for a parent, teenager or adult cerebral palsied group. Many of the suppliers mentioned before--such as Maddak (G18), Fashion Able (G10), Fred Sammons (G27), etc.--carry the aids cited in these publications. Breck's of Boston (G28), Sunset House (G33), Spencer Gifts (G32), Lewis and Conger (G31) and Joan Cook (G30) are all mail order houses that carry items useful to the handicapped person. If one is alert, one can find things in supermarkets and department stores that were not designed for the handicapped person specifically but do serve as aids. Other ideas and resources for household activities are listed at the end of this chapter.

• MEAL PREPARATION

The handicapped child should take part in meal preparation, even if only a small part. If the child observes procedures, he will learn what to do. The parent should explain the use of appliances, measurement techniques, basic ingredients, and timing procedures. A product of the Institute of Rehabilitation Medicine, Mealtime Manual for the Aged and Handicapped (F8), contains information on food preparation, recipes, nutrition, aids and appliances. Several cookbooks using pictures instead of words have been produced to teach cooking to mentally retarded persons. Some of these are A Special Picture Cookbook (F10), Cooking Activities for the Retarded Child (F7), and Cooking with Pictures (F9). Betty Crocker has published a large print cookbook that can be useful to the visually handicapped person.

It takes much patience and sometimes courage for the parent of a cerebral palsied child to teach him to cook. However, if this person is someday going to be independent, he must be able to take care of his own needs, even if it is only fixing his breakfast or making a simple meal. He must also learn how to work safely in the kitchen, what to do in an emergency, whom to call, and where to ask for assistance for which service.

The severely physically disabled person may never be able to prepare a meal completely himself, but if he learns how to cook and/or how to read a recipe, he can direct someone else. This could be useful in a group home situation where severely physically involved persons can live with physically able persons who are mentally retarded. Or, Meals-on-Wheels, a volunteer organization active in many communities, might make it possible for a person unable to prepare his food to live independently. A box containing one hot meal and one cold meal is delivered to the person's home daily, except on weekends. He needs only to be able to feed himself. The volunteer will set the food on a tray, open the milk carton and put in the straw or whatever else is needed so that he can eat it himself. The charge for this service is minimal.

- SHOPPING AND OTHER COMMUNITY SKILLS

Part of becoming independent is the ability to do one's own shopping. The cerebral palsied child needs to learn the value of money just as any other child; therefore, he should have an allowance or earn his money through doing chores. In addition, he should be taken to the supermarket and shopping malls to help in purchasing various items. If he has a problem handling coins, perhaps a moccasin purse or a purse with slots that secure the coins will help. If he finds if difficult to carry things, he should have a shoulder bag or knapsack. Wheelchair users should have a "wheelchair pouch," available through Fred Sammons, Inc. (G27), to store small items at the side of the chair. A larger 14" x 14" carrying bag that attaches across the handgrips in back of a wheelchair can also be obtained through the same company. A clever person can make any of these bags quite economically.

Elwyn Institute has developed two workbooks, Guide to the Community (F2) (F3) for teaching mildly retarded teenagers and adults money management, banking, budgeting, job hunting, taxes and insurance. Although not designed for physically handicapped persons, these workbooks can help teach the skills that every independent person needs and can be particularly useful to group homes. More basic community skills training can be taught by using the Life Skills for Developmentally Disabled Manual for Training Clients (A17). This also is not designed specifically for the physically disabled, but the trainer can make adaptations where necessary. Written for use in a residential institution, the manual can be used well in a group home or activities center.

- SEXUALITY

Another booklet by Elwyn Institute, Remedial Adult Education for the Physically Handicapped: A Curriculum Outline, An Instructional Manual of Basic Applied and Adaptive Information on Daily Living Skills for Persons with Cerebral Palsy or Other Physical Disabilities (F4), is well suited for a group home, insitution, activities center or school use. It is a multi-purpose manual covering such areas as social image, home management, crisis intervention, money management, employment orientation and human sexuality. Several other books addressing the subject of human sexuality are also listed in the end of this section (F22-F32). If the cerebral palsied person is to be accepted as a contributing member of society, the area of sexual adjustment must also be met.

- TRANSPORTATION

To function effectively in the community, the cerebral palsied person must have access to convenient modes of transportation. Many cerebral palsied persons can learn to use public transportation; others can learn to drive with certain adaptation (e.g., one-handed driving, hand controls, left foot accelerators (F36), etc.). For the severely disabled person, vans (F34) (F35) (F37) (F38) designed for wheelchair users make transportation easier. These vans can be equipped with ramps (F21) or mechanical lifts so that the person in a wheelchair need not be transferred or lifted. Also, several mechanisms are available for storing wheelchairs (F39-F44) in cars so that they need not be lifted, making it possible for many handicapped persons to manage their own wheelchair loading. (See Section B for information on car seats.)

For the person unable to drive himself or needing occasional assistance, a variety of organizations provide transportation in specific situations. Research within one's own community should locate these resources; some communities even have a directory of such services (F33). Wheelchair-accessible buses and subways as well as curb cuts to sidewalks and ramps to public buildings are becoming more common throughout the country.

When discussing transportaiton, one must not forget getting in and out of the home. If there are steps that cannot be navigated by the handicapped person, a ramp (F21), elevator or stair-lift (F19) (F20) should be made available for easier accessibility.

- RECREATION

To truly become part of the whole community, the handicapped person should also take advantage of all community resources, including recreation. Many current publications offer ideas for adapting games and equipment for disabled persons. Some are listed at the end of this chapter (F45) (F46) (F49) (F50); however, for more ideas, one should contact the local parks and recreation and community center personnel. The new field of therapeutic recreation addresses itself to this area explicitly. If a recreation therapist is nearby, he can assist with programs and guidance. (Refer to the comments on toys and play in Section A for further guidance on recreation for the cerebral palsied person.)

With the emergence of new laws mandating that all public facilities be made accessible to the handicapped, the possibilities for acceptance into community activities are becoming greater all the time. It is the responsibility of the families of cerebral palsied persons to see that they learn to use their local resources and become acclimated to the community at an early age. In this way the cerebral palsied person can avoid becoming "homebound."

F. REFERENCES--HOUSEHOLD AND COMMUNITY INVOLVEMENT

• BASIC SKILLS IN COMMUNITY LIVING

Blumenfeld, Jane; Thompson, Pearl E.; and Beverly S. Vogel. Help Them Grow. See A37.

Copeland, Mildred; Ford, Lana; and Nancy Solon. Occupational Therapy for Mentally Retarded Children. See A12.

F.1 Dickman, Irving R. Independent Living: New Goal for Disabled Persons. 1975, 27 pp.
Booklet (No. 522)

COST: $ 0.50
Available through: Public Affairs Pamphlets
381 Park Avenue South
New York, New York 10016

USERS: C

F.2 Elwyn Institute. Guide to the Community, Vol. I. Earning and Spending Your Money, 1975.

Available through: Elwyn Institute
Elwyn, Pennsylvania 19063

Workbook suitable for teenagers and adults on job hunting, banking, budgeting.

USERS: NM

F.3 Elwyn Institute. Guide to the Community, Vol. II. Tax and Insurance Facts, 1975.

Available through: Elwyn Institue
Elwyn, Pennsylvania 19063

Workbook about taxes and insurance: explanation and sample forms.

USERS: NM

F.4 Elwyn Institute. Remedial Adult Education for the Physically Handicapped: A Curriculum Outline. An instructional manual of basic applied and adaptive information on daily living for persons with cerebral palsy or other physical disability. by Marvin Rosen, Ph.D.; Stacy DiGiovanni, B.A.; and Dale Peet, B.A., 1975. 67 pp.

Available through: Elwyn Institute
Elwyn, Pennsylvania 19063

A good training guide covering the following areas: social image, home management, mobility training, crisis intervention, consumer education, employment orientation and human sexuality.

USERS: M, NM

Finnie, Nancy R. Handling the Young Cerebral Palsied Child at Home. See A15.

Folsom, Geneva; Federici, Jean; and Myra Feldman. Life Skills for the Developmentally Disabled. See A17.

F.5 Homemaker Health Aide Service of the National Capital Area, Inc.
1825 Connecticut Avenue, N.W., Suite 100
Washington, D.C. 20009
(202) 387-6500

Provides persons to assist with personal care, child care, light housework, errands, trips to doctor appointments for aging or chronically ill persons.

USERS: C

• MEAL PREPARATION

F.6 Crocker, Betty. Cooking with Betty Crocker Mixes. Large type edition, 1974.

Package directions and simple recipes.

USERS: C

F.7 Kahan, Ellen House. Cooking Activities for the Retarded Child.
Abingdon Press, 1974.
Paperback

COST: $2.50

USERS: NM, C

F.8 Klinger, Judith Lannefeld, O.T.R.; Frieden, Fred H.; and Richard A. Sullivan. Mealtime Manual for the Aged and Handicapped. Prepared by Institute of Rehabilitation Medicine, New York University, under a grant from the Campbell Soup Fund, 1977.

COST: $2.00--soft cover, spiral bound ORDER#: 10462
$5.95--hard cover ORDER#: 10461

Available through: Simon & Schuster, Inc.
1 West 39th Street
New York, New York 10018

A well illustrated book of aids, techniques and menus for the handicapped cook. Contains information on easy-to-use kitchen devices and appliances, convenience foods, tips on proper nutrition, easy recipes and preparation techniques.

USERS: M, NM, C

F.9 Staples, Katherine, Asst. Prof. Cooking with Pictures.

Available through: College of Home Economics
Food and Nutrition Department
North Dakota State University
Fargo, North Dakota 58102

USERS: NM, C

F.10 Steed, Freida Reed. A Special Picture Cookbook. 1974.

COST: $4.95
Available through: H and H Enterprises, Inc.
Box 3342
Lawrence, Kansas 66044

A 94-page spiral notebook of simple recipes in picture form. Excellent for teaching the retarded child or adult basic cooking.

USERS: NM, C

• HOUSEHOLD AIDS

F.11 American Heart Association. Do It Yourself Again. 1969, 45 pp. Illus.
Paperback

Available through: American Heart Association
44 East 23rd Street
New York, N.Y. 10010

Self-help devices for the stroke patient and hemiplegic homemaker. Well illustrated.

USERS: M, NM, C

F.12 Fasow, Karen, O.T.R. "Adapted Fitted Bed Sheets." American Journal of Occupational Therapy 31:5 (July 1977).

Bed sheets adapted with Velcro fastenings to make it easier for disabled persons to make their beds.

F.13 Gilday, 3-in-1 Sheet
Gilday
Dept. pp
Box 122
Little Falls, New Jersey 07424

Top sheet, bottom sheet and pillow pocket combined in one unit. Made of cotton and polyester.

COST:	$20.95--ppd.	33" x 39" x 76"
	$21.95--	twin
	$24.95--	double
	$33.95--	queen
	$42.95--	king

F.14 Hodgeman, Karen, O.T.R., and Eleanor Warpeha, O.T.R. Adaptations and Techniques for the Disabled Homemaker. Sister Kenny Rehab. Publication No. 710, 30 pp. Illus.

COST: $2.95

Available through: Department 203
Sister Kenny Institute
Chicago Ave. at 27th St.
Minneapolis, Minnesota 55407

Well illustrated guide to aids for the handicapped homemaker.

USERS: M, NM, C

F.15 Institute of Rehab. Medicine. "The Homemaker with Incoordination." 16 mm color sound film, 28 min.

Available through: National Medical Audio-Visual Center (Annex)
Station k
Atalnta, Georgia 30324

Allow three weeks for booking. Free short-term loan.

To purchase: Learning Resource Facility
Institute of Rehab. Medicine
New York Univeristy Medical Center
400 E. 34th St.
New York, N.Y. 10016

For other information: Occupational Therapy Dept.
Institute of Rehab. Medicine

Film shows a homemaker with cerebral palsy--planning, shopping, preparing meals (including cutting and chopping), handling appliances, cooking, cleaning up, setting the table and serving. Careful selection and safe use of equipment is stressed, as in cutting or moving hot pans.

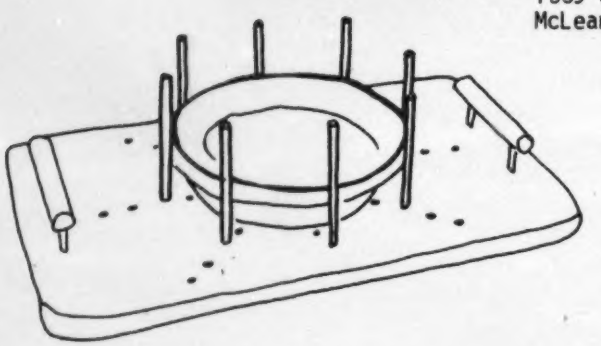
USERS: M, NM, C

Lowman, Edward, and Judith Klinger. Aids to Independent Living. See B10.

F.16 Mesmeralda's "Carri-Me Tray"
11" x 19" durable wood tray with holes for pegs that can be placed around dish to be carried. Two wooden handles.

COST: $12.50

Available through: Mesmerelda's Ltd.
1339 Chain Bridge
McLean, Virginia 22101



F.16 Mesmerelda's "Carri-Me Tray"

F.17 Mueller Faucet Wrench

Instructions available through:
James Mueller
Job Development Laboratory
George Washington University
Medical Center

For the person unable to turn on and off faucets that do not have levers. The handle is made of ½" polyethylene attached by nylon dowels to the wrench body, also of nylon. The wrench is drilled and slotted to accept a variety of faucet configurations.

F.18 North Carolina State University. Aids to the Handicapped. Booklet on homemaking and grooming.

COST: $ 0.35
Available through: Extension Publication
318 Ricks Hall
North Carolina State University
at Raleigh
Raleigh, North Carolina 27607

USERS: C

Robinault, Isabel. Functional Aids for the Multihandicapped. See B12.

See also Section G: Mail Order Houses.
Not specialists in aids for the handicapped, but often have gadgets that are useful.

See also Section G: Suppliers of Aids and Equipment

See also Section G: Publications

• RAMPS, LIFTS AND ELEVATORS

F.19 American Stair-Glide Corp.
4001 East 138th Street
Grandview, Missouri 64030

Electric stair lists and elevators for indoors and outdoors.

F.20 Earl's Stairway Lift Corp.
2513 Center Street
Cedar Falls, Iowa 50613

Electric stair lifts and elevators for indoors and outdoors.

F.21 Handi-Ramp
1414 Armour Blvd.
Mundelein, Illinois 60060
(312) 566-5861

Ramps for vans, buses and buildings; portable and lightweight.

See also: G34. Accent on Living Buyers Guide.

• SEXUALITY

F.22 AAMD. Sexual Rights and Responsibilities of the Mentally Retarded.
Proceedings of the Conference of the American Association on Mental Deficiency, Region IX, University of Delaware, Newark, Delaware, October 12-14, 1972.

COST: $2.50 or $3.00, collect

Available through: Medora S. Bass
216 Gleen Road
Ardmore, Pennsylvania 19003

USERS: M, NM

F.23 Cruz, Felix de la and Gerald LaVech, eds. Human Sexuality and the Mentally Retarded. New York: Brunner/Mazel, 1973, 347 pp.

COST: $8.95

An overview of the physical, psychological and social aspects of sexuality of the mentally retarded--sexual development, effects of institutionalization, sex education programs, available and future types of contraception, marriage and parenthood.

USERS: M, NM

F.24 Dickman, Irving R. Sex Education for Disabled Persons. 1975, 28 pp. Booklet No. 531

COST: $ 0.35
Available through: Public Affairs Pamphlets
381 Park Avenue South
New York, New York 10016

USERS: NM, C

F.25 Fischer, Henry L., Ph.D.; Krajicek, Marilyn J.; and William A. Borthick, M.A. Sex Education for the Developmentally Disabled: A Guide for Parents, Teachers and Professionals. University Park Press, 1974.

COST: $4.75

A structured client interview and picture series that provides a controlled, productive environment in which developmentally disabled persons can ask questions and learn about sexuality. An invaluable aid in the treatment of this difficult but fundamentally important problem. Practical suggestions, objectives, techniques, materials for teacher/professional workshops.

USERS: M, NM, C

F.26 Johnson, Warren R., Ed.E. Sex Education and Counselling of Special Groups. Springfield, Illinois; Charles C. Thomas, 1975.

A frank discussion of all aspects of sex including different behaviors and the attitudes of society about them. The needs and problems of different handicapped persons are discussed, and a variety of solutions are presented. The reader needs to sift out the material relevant to his client needs and moral standards.

USERS: M, NM, C

F.27 Masters, W., and V. Johnson. Human Sexual Response. Boston: Little, Brown & Co., 1966.

USERS: M, NM, C

F.28 Masters, W., and V. Johnson. Human Sexual Inadequacy. Boston: Little, Brown & Co., 1966.

USERS: M, NM, C

F.29 McCary, J. L. Human Sexuality. New York: Von Nostraut, 1967.

USERS: M, NM, C

F.30 McDowell, F. H. "Sexual Manifestations of Neurologic Disease." Medical Aspects of Human Sexuality (April 1968), pp. 13-21.

Discussion of the neurological aspects of sexual functioning and changes noted with specific neurological dysfunction.

USERS: M

F.31 Shaul, Susan; Bogle, Jane; Hale, Julia; and Ann Duecy Norman. Toward Intimacy: Family Planning and Sexual Concerns of Physically Disabled Women. 1977, 63 pp.

COST: $1.50
Available through: Planned Parenthood of Snohomish County, Inc.
2730 Hoyt
Everett, Washington 98201

A frank discussion of such concerns of the disabled woman as body image, relationships, infections, bowel and bladder problems, sexual exploration, menopause, contraception.

USERS: M, NM, C

F.32 Shaul, Susan, et al. Within Reach. 1977, 48 pp.

COST: $1.50
Available through: Planned Parenthood of Snohomish County, Inc.
2730 Hoyt
Everett, Washington 98201

Deals with the elimination of environmental barriers and societal attitudes that limit the disabled woman's access to health care services. Discusses clinics, counselling, contraceptive information pertaining to specific disabilities, and federal regulations affecting service delivery.

USERS: M, NM, C

• TRANSPORTATION

F.33 Metropolitan Washington Council of Governments. Directory of Special Transportation Services, Metropolitan Washington Area. 1975.

Available through: Metropolitan Washington Council of Governments
1225 Connecticut Avenue, N.W.
Washington, D.C. 20036

Lists all the organizations and agencies in the Washington, D.C. area that provide transportation for handicapped or elderly persons.

USERS: NM, C

Vans and Driving Aids

F.34 The Braun Corporation
1014 South Monticello
Winimac, Indiana 46996
(219) 946-6157

Wheelchair vans.

F.35 The Cheney Company
3015 South 163rd Street
New Berlin, Wisconsin 53151
(414) 782-1100

Local distributor: Baltimore Elevator and Dumbwaiter Co., Inc.
6300 Falls Road
Baltimore, Maryland 21209
(301) 825-1440

Wheelchair vans.

F.36 Gresham Driving Aids, Inc.
P.O. Box 405
30800 Wixom Road
Wixom, Michigan 48096

Special adaptations for handicapped drivers--hemiplegic, paraplegic or quadraplegic.

F.37 H. P. Bus Corp. of America
Faulkner Street
North Billerica, Massachusetts 01862
(617) 729-8983

Local distributor: VANGO Corp.
817 Timber Branch Parkway
Alexandria, Virginia 22302
(703) 836-1387

1975 Volkswagen bus with ramp (non-motorized), lowered floor for easy entry.

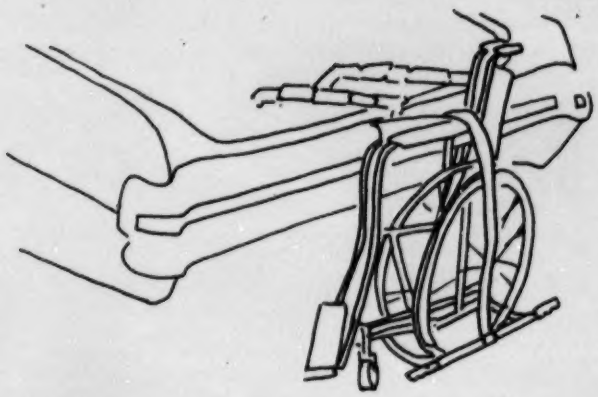
F.38 Speedy Wagon
P.O. Box 159
St. Charles, Missouri 63301
(314) 447-5145

Vans especially adapted for the wheelchair-bound driver.

Wheelchair Loaders

F.39 EZ-1 Wheelchair Loader
The Wheelchair Carrier Corporation
P.O. Box 9328
Phoenix, Arizona 85068
(602) 996-6123

A mechanism for loading a wheelchair into the trunk of a car; operates on the "leverage principle" (no motor).

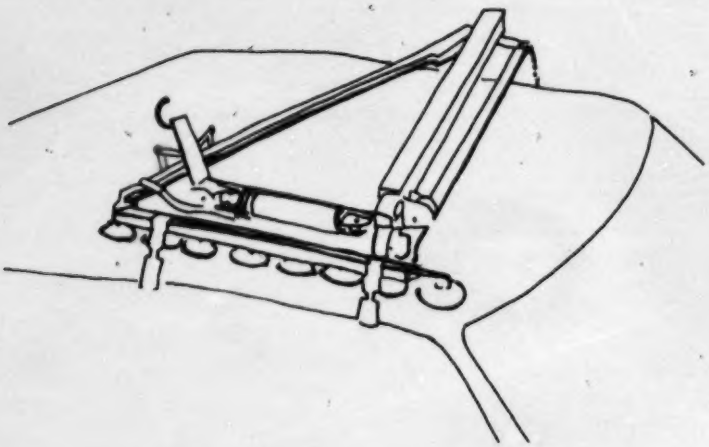


F.39 EZ-1
Wheelchair Loader

F.40 Hoyer Kartop-Lift

Everest & Jennings. Inc.

Apparatus attaches with suction cups and drip-eave hooks to roof of car. Stacks compactly when not in use. Cover available. Hydraulically operated lift to transfer severely disabled persons from wheelchair to car.

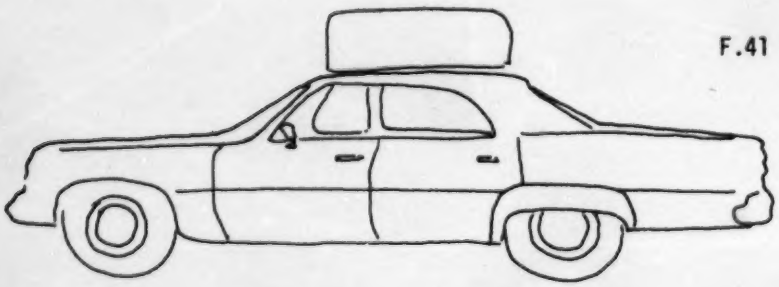


F.40 Hoyer Kartop-Lift

F.41 Lowry, Automatic Cartop Wheelchair Loader-Carrier

For information, write: Innovations, Inc.
Medical Products Division
Box 1418-A
Pittsburgh, Kansas 66762

Easily installed on any car, activated by remote control buttons. Weatherproof cover; measures 43" x 50" x 14", holds any size folding wheelchair.



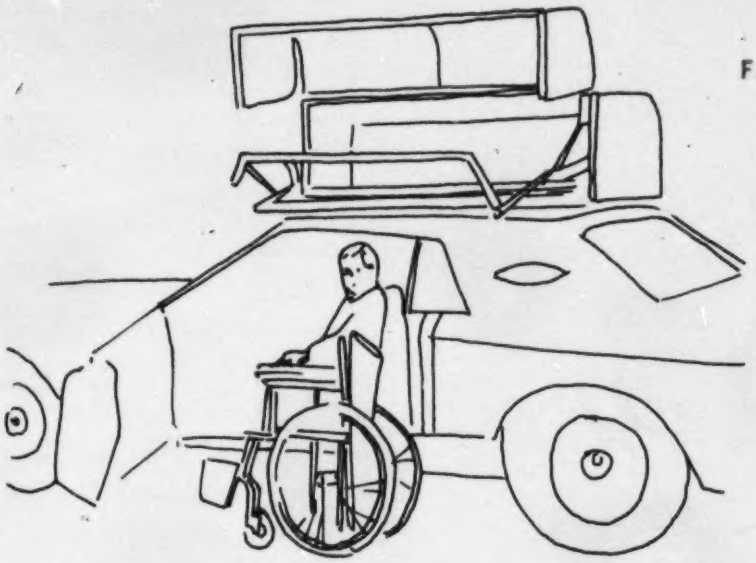
F.41 Lowry, Automatic Cartop Wheelchair Loader-Carrier

F.42 Mark VII Electromatic Top Loader

The Wheelchair Carrier Copr.
P.O. Box 9328
Phoenix, Arizona 85068
(602) 265-5666

COST: $1,300.00 (includes installation)

4' x 5' x 21" car-roof wheelchair storage unit with electric loading-unloading mechanism. Can be operated by handicapped driver without assistance. Fits any car. Installation arrangements through participating Ramada Inns.



F.42 Mark VII Electromatic Top Loader

F.43 Owen Miniwich

Owen-Pacific Associates
412 Woodward Blvd.
Pasadena, California 91107
(213) 796-5167

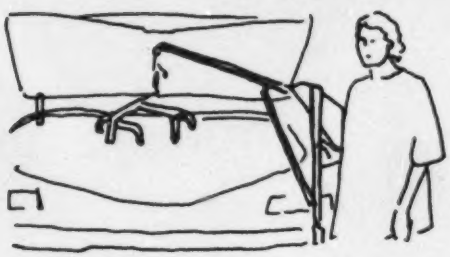
A small hand-operated hoist for loading a wheelchair behind the front seat of a two-door car.

F.43 Owen Miniwich

F.44 Sav-A-Lift

Sav-A-Lift
1931 Consuello Drive
Holiday, Florida 33590

Electronically powered hoist to lift wheel chair into trunk of car.



F.44 Sav-A-Lift

See also: Section E -- for information on car transfer aids.

See also: Section B -- for information on car seats.

• RECREATION

F.45 American Alliance of Health, Physical Education, and Recreation. Materials on Creative Arts for Persons with Handicapping Conditions. (1977 revision), 104 pp.

COST: $3.50 ORDER#: 245-26002

Available through: AAHPER
Publication - Sales
1201 16th Street, N.W.
Washington, D.C. 20036

A guide to over 400 books, proceedings, articles, films, etc. covering arts and crafts, dance, drama, puppetry, music, bibliotherapys, creative writing and photography.

USERS: M, NM, C

F.46 Fait, Hollis F., Ph.D. Special Physical Education: Adapted, Corrective, Developmental. Philadelphia: W.B. Saunders, 1972, 3rd Edition, 442 pp.

COST: $1.00
Available through: W. B. Saunders Co.
West Washington Square
Philadelphia, Pennsylvania 19105

A general overview of special physical education, pointing out considerations for particular disabilities, including mental retardation and cerebral palsy.

USERS: M, NM

High, Elizabeth C. and Kathy L. Moyers. Developing Pre-Vocational/Vocational Skills in Developmentally Disabled Persons. See A61.

F.47 Kraus, Richard, Ed.D. Therapeutic Recreation Service, Principles and Practices. Philadelphia: W.B. Saunders, 1973, 234 pp.

COST: $9.75
Available through: W. B. Saunders Co.
West Washington Square
Philadelphia, Pennsylvania 19105

Background and ideas for recreational therapy.

USERS: M, NM

F.48 National Park Service, U.S. Department of the Interior. National Park Guide for the Handicapped. 1974.

COST: $ 0.40 STOCK#: 2405-0286

Available through: Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

USERS: NM, C

F.49 O'Brien, Sylvia B. More Than Fun: A Handbook of Recreational Programming for Children and Adults with Cerebral Palsy. 1960, 38 pp.

COST: $ 0.20
Available through: United Cerebral Palsy Associations, Inc.

A guide for agency personnel and professionals in the fields of recreation, physical education, and group work. Reviews community responsibility for program planning, steps in identifying those to be served, organization of the program to meet specific needs, adaptation of activities and forms of recreation to be included.

USERS: M, NM

F.50 Pomeroy, Janet. Recreation for the Physically Handicapped. New York: The Macmillan Co., 1964, 382 pp.

COST: $13.95
Available through: The Macmillan Co.
866 Third Avenue
New York, New York 10022

An excellent collection of ideas for recreational activities. of all types with guides for adaptations according to each person's needs.

USERS: M, NM, C

F.51 Thompson, Morton. Recreation for the Homebound Person with Cerebral Palsy. 1960, 38 pp. Illus.

COST: $ 0.25
Available through: United Cerebral Palsy Associations, Inc.

A handbook designed to guide local affiliates of the Associations or similar community organizations in assisting parents and volunteers working with the homebound to develop recreation programs. Contains specific information on activities and methods for adapting them to different age levels and varied disabilities. Resources (with addresses), equipment suppliers, craft supply firms, a list of commercially manufactured games, bibliographies, and forms used in the program are included.

USERS: NM, C

Toy Library Association.
See A20.

G. GENERAL RESOURCES

- SUPPLIERS OF AIDS AND EQUIPMENT

G.1 Abbey Medical

13500 S. Figueroa Street
Los Angeles, California 90061
Toll free no. (800) 421-1170
Baltimore, MD (301) 258-3400
Rockville, MD (301) 881-2460
Bala-Cynwd, PA (215) 664-8970
Pittsburgh, PA (412) 683-5100

Bean bag, inflatable and foam rolls; wedges; shapes; balls; wheelchairs; special tables; self-help aids; splinting materials; general medical and physical therapy equipment.

G.2 Adaptive Equipment Company

11443 Chapin Road
Chesterland, Ohio 44026
(216) 729-7869

Therapy rolls, adaptive wedges, tilt board, Pone chair, prone boards.

G.3 Adaptive Therapeutic Systems, Inc.

36 Howe Street
New Haven, Connecticut 06511
(203) 865-1242

Mancino chair, the Enabler, the Pully Eater, the Two-Step Eater, the Body Harness, the ATS Hand Stabilizer, the communicator, Universal plate positioner, developmental crawler, flexion mit, ATS Prone Board.

G.4 Better Sleep, Inc.

Dept. GZ
New Providence, New Jersey 07922

Patient comfort aids--bath pillows, cushions, bedboards, etc.

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G.5 C & P Telephone Company
Public Relations Office, Room 790
1325 G Street, N.W.
Washington, D.C. 20005

Services for Special Needs - A pamphlet listing all the special equipment, adaptations and services for the handicapped available through the telephone company. It lists such things as speaker phones, head sets, and amplifiers.

G.6 Cleo Living Aids
3957 Mayfield Road
Cleveland, Ohio 44121

Self-help aids--reachers, one-handed opener, Dycem (non-slip) pads, etc.

G.7 Equipment for the Disabled
2 Foredown Drive
Portslade, Sussex BN4 2BB
England

COST: £5.00 (each booklet)

A well illustrated series of booklets showing aids available in England; also, instuctions for many aids that can be easily made. The booklets cover the following topics: wheelchairs, outdoor transportation, home management, disabled child, housing and furniture, hoist and walking aids, clothing and dressing for adults, disabled mother, personal care, leisure and gardening, communication.

USERS: M, NM

G.8 Equipment Shop
P.O. Box 33
Bedford, Massachusetts 01730

Corner seats, prone boards.

G.9 Everest and Jennings
1803 Pontius Avenue
Los Angeles, California 90025

Wheelchairs, bathroom aids, walkers.

G.10 Fashion Able
Dept. GP
Rocky Hill, New Jersey 08553

Aids for activities of daily living, clothing, recreation.

G.11 Guardian Products Co., Inc.
82 Lankershim Blvd.
North Hollywood, California 91605

Safe-T-Flex Crutch Tips--a crutch tip that angles when crutch is placed on the ground so that it grips the ground; Invalid-Eze Female Urinal.

G.12 Hausman Industries, Inc.
130 Union Street
Northvale, New Jersey 07647
(201) 767-0255

Standing tables, cutout tables, mats, adjustable height tables, multipurpose utility stick, other physical therapy equipment.

G.13 The Independence Factory
P.O. Box 597
Middletown, Ohio 45042

Inexpensive simple self-help aids such as button hooks, dressing aids, extended toothbrush, ignition-starting aid, double handle for cooking pot, Q-tip holder, shaving cream applier. Aids made by volunteers--donations asked for devices range from $ 0.75 to $4.00; catalog--$ 0.25.

How To Make It Cheap Manual: Vol. I --$1.50 plus $.30 postage
Vol. II--$1.50 plus $.30

G.14 Invacare Corporation
1200 Taylor Street
Elyria, Ohio 44035

Wheelchairs, tub seats, grab bars, child safety posture commode.

G.15 Kaye Products, Inc.
2819 Hillsborough Road
Durham, North Carolina 27705
Attn: Edward S. Howle (designer)

Supportive equipment for handicapped children: standing frame, prone frames, supination and pronation wedges, child's insert seat, corner chair with table, infant seat.

G.16 Library of Congress
Division for Blind and Physically Handicapped
1291 Taylor Street, N.W.
Washington, D.C. 20011
(202) 882-5500

Talking books in record or tape form, Braille books. Can provide special attachments for talking book machines--different controls, head phones, pillow.

G.17 Lumex, Inc.
100 Spence Street
Bay Shore, New York 11706

Medical equipment for hospitals and home--walking aids, grab bars, tub seats, commodes, wheelchair seat belts, special chairs.

G.18 Maddak, Inc.
Industrial Road
Pequannock, New Jersey 07440

Suppliers of rehabilitation aids for the handicapped. Special chairs; adaptive aids for feeding, dressing, grooming; recreation, household and therapy.

G.19 Medical Equipment Distributors, Inc.
8004 West Chester Pike
Upper Darby, Pennsylvania 19082
Toll free no. (800) 257-7801

Wheelchairs; special chairs: Hogg, relaxation; Med. Bath Chair; safety posture commode; standing tables; self-help aids, etc.

G.20 G. E. Miller, Inc.
484 South Broadway
Yonkers, New York 10705
(914) 969-4036

Special wheelchairs: relaxation, the Mancino chair; the Pulley eater; universal plate positioner; prone board; perceptual motor testing materials and programs; self-help aids.

G.21 Mulholland and Associates
1563 Los Angeles Avenue
Saticoy, California 93003
(805) 647-5527

Mulholland Growth Guidance Chairs, prone stander.

G.22 PENCOR

Industries Division - Bureau of Correction
Box 231
Camp Hill, Pennsylvania 17011
(717) 787-7486

Therapeutic furniture: relaxation chairs, prone boards, vestibular boards, scooter boards, foam and cotton filler wedges, rolls and mats.

G.23 Prentke Romich Company

R.D. 2, Box 191
Shreve, Ohio 44676
(216) 567-2906

Stanley Swing Door Operator, control switches, environmental control boxes, non-verbal communication aids.

G.24 J. A. Preston Co.

71 Fifth Avenue
New York New York 10003
Toll free no. (800) 221-2425

"Tumble-Forms"; wedges, rolls, balls, etc.; wheelchairs; self-help aids; simple puzzles (with knobs); perceptual motor materials; general medical and physical therapy equipment.

G.25 Rehab Med

Rehabilitation Equipment, Inc.
1556 Third Avenue
New York, New York 10028
(212) 427-9595

Aronson Portable Prone Stander, Responder Chair, Supporta Bather, Adapta Helmet.

G.26 Rolyan Medical Products

P.O. Box 555
Menomonee Falls, Wisconsin 53051

Supplier of Polyform, an excellent material for making adaptive aids and splints. Molds easily after heating in hot water; rough edges smoothed with fingers when heated.

G.27 Fred Sammons, Inc.

Box 32
Brookfield, Illinois 60513

Supplier of adaptive aids for feeding, dressing, and hygiene; rivets, Velcro, "D rings," etc. for adapting other aids.

• MAIL ORDER HOUSES

Not specialists in items for the disabled, but often have inexpensive gadgets that are useful. Ask for catalogs.

G.28 Breck's of Boston
100 Breck Building
Boston, Massachusetts 02201

G.29 Brookstone Company
127 Vose Farm Road
Peterborough, New Hampshire 03458
(603) 924-7181

Unusual tools, kitchen utensils and other household gadgets.

G.30 Joan Cook
P.O. Box 21628
Ft. Lauderdale, Florida 33335

Shampoo dispenser, no-spill cup, bath mattress, hammock chair, big number for touch-phones, other good ideas.

G.31 Lewis and Conger
39-25 Skillman Avenue
Long Island City, New York 11104

G.32 Spencer Gifts
455 Spencer Blvd.
Atlantic City, New Jersey 08404

G.33 Sunset House
151 Sunset Blvd.
Beverly Hills, California 90213

G.34 Accent On Living
P.O. Box 700
Gillum Road & High Drive
Bloomington, Illinois 61701

COST: $3.50 per year

Quarterly magazine with articles and advertising useful to the disabled.

G.35 Accent On Living Buyer's Guide (1977), published by Accent On Living.

COST: $10.00

A compact listing of sources, many of which are advertised in their quarterly magazine, for aids and equipment for the disabled.

G.36 Aids and Appliances for the Blind and Visually Impaired, published by American Foundation for the Blind. See G51.

Comprehensive catalog covering watches, clocks, canes, and household, personal, recreation, educational and medical aids and appliances. Includes prices.

G.37 American Journal of Mental Deficiency, published by American Association on Mental Deficiency. See G48.

Professional journal with articles pertaining to all aspects of handling the mentally retarded person. Bi-monthly.

G.38 American Journal of Occupational Therapy, published by
The American Occupational Therapy Association
6000 Executive Blvd.
Rockville, Maryland 20852

Professional journal published 10 times a year.

G.39 Equipment for the Disabled, published by
The Oxford Regional Health Authority
Department of Health and Social Security
2 Foredown Drive
Portslade, Sussex BN4 2BB,
England

COST: Approx. £30.00 for series of booklets.

Illustrated guides to equipment and aids available in England under the following categories: communication; clothing and dressing for adults; home management; disabled mother; personal care; leisure and gardening; housing and furniture; hoists, walking aids; disabled child. Some articles can be exported, some can be made.

G.40 Green Pages, News Magazine for the Disabled.
641 West Fairbanks
Winter Park, Florida 32789

COST: $6.00 per year

Quarterly directory for products and services for the use of disabled persons and rehabilitation personnel. An excellent directory; quite conclusive.

G.41 International Guide to Aids & Appliances for the Blind and Visually Impaired (1977), 255 pp., published by American Foundation for the Blind. See G51.

Sources of aids in 25 different countries.

G.42 ISAARE, Information System on Adaptive and Assistive and Recreational Equipment, 1975.
UCPA
7117 S.E. Harold Street
Portland, Oregon 97206

An extensive collection of resources under the following categories: Existence, Communication, Insitu, Travel, Adaptation to and of the Environment, Rehabilitaiton.

G.43 Mental Retardation; American Journal of Mental Deficiency, published by
American Association on Mental Deficiency
5201 Connecticut Avenue, N.W.
Washington, D.C. 20015

Two professional journals with articles pertaining to all aspects of handling the mentally retarded person. Published bi-monthly.

G.44 Rehabilitation Gazette
4502 Maryland Avenue
St. Louis, Missouri 63108

Annual journal filled with articles, information on new devices, legislation, recreation, travel, architecture barriers, sources for assistance for all areas of rehabilitation.

Contribution: $3.00 for disabled persons;
$5.00 for nondisabled persons.

- PUBLISHERS

G.45 Charles C. Thomas
301-327 East Lawrence Avenue
Springfield, Illinois 62717

Publishes many books in the area of developmental disabilities; particularly good technical books for professionals.

G.46 University Park Press
Chamber of Commerce Building
Baltimore, Maryland 21202

Publishes many books about developmental disabilities.

- ORGANIZATIONS

G.47 American Academy for Cerebral Palsy
1255 New Hampshire Avenue, N.W.
Washington, D.C. 20036

Academy of professionals working in the field of cerebral palsy care and treatment.

G.48 American Association on Mental Deficiency
5201 Connecticut Avenue, N.W.
Washington, D.C. 20015

Source of publications, conferences and research on mental deficiency.

G.49 AAHPER/IRUC
American Alliance for Health, Physical Education and Recreation/Information Research Utilization Center
1201 16th Street, N.W.
Washington, D.C. 20036

Information on recreation and physical education--books, reprints, etc. Consultant services to organizations and individual programs.

G.50 American Coalition of Citizens with Disability
1346 Connecticut Avenue, N.W., Suite #817
Washington, D.C. 20036
(202) 785-4265

Research utilization for consumers.

G.51 American Foundation for the Blind
15 West 16th Street
New York, New York 10011

Source of information on aids to the blind.

G.52 American Occupational Therapy Association
6000 Executive Blvd., Suite 200
Rockville, Maryland 20852

Professional association of occupational therapists.

G.53 Children's Rehabilitation Center
Department of Occupational Therapy
Route 250 West
Charlottesville, Virginia 22901

Instructions for making roll-top sitter, floor sitter, chair inserts, prone board, and desk-top adjustable easel.

G.54 Dental Guidance Council for Cerebral Palsy
122 East 23rd Street
New York, New York 10010

Source of information on dental care for cerebral palsied persons.

G.55 Elwyn Institute
Elwyn, Pennsylvania 19063

Many training manuals for use with the mentally retarded. Write for catalog.

G.56 Fairfax County, Virginia; Human Services for Aged and Disabled.
(703) 691-3253

Information on services available in the county.

G.57 The Job Development Laboratory
The George Washington University Medical Center
Ross Hall, Room 420
2300 I Street, N.W.
Washington, D.C. 20037

Instructions for making hand guards, concealed protective helmet, contour stacked seating, faucet wrench. Source of other information on aids and resources.

G.58 Meals-On-Wheels

Consult your local telephone book for telephone number. This volunteer organization delivers meals to the homes of persons who are unable to prepare their own meals.

G.59 National Association for Retarded Citizens
2709 Avenue E, East
Arlington, Texas 76011

Sponsors of advocacy, publications, conferences, etc., for the benefit of retarded citizens.

G.60 National Easter Seal Society for Crippled Children and Adults
2023 Ogden Avenue
Chicago, Illinois 60612

Publishes many pamphlets and booklets helpful to cerebral palsied persons, their families and professionals. Write for catalog.

G.61 National Information Center for the Handicapped
P.O. Box 1492
Washington, D.C. 20013

Sources of all types of information for the handicapped.

G.62 President's Committee on Employment of the Handicapped
Washington, D.C. 20210

Information on trends and rights for employment of the handicapped.

G.63 Rehab. Engineering Program
University of Tennessee
1248 La Paloma
Memphis, Tennessee 38114

Information on research of specialized seating for severely handicapped persons, using vacuum forming and polyurethane foam molding--wheelchair inserts, commode seat; feeding and communication aids.

G.64 United Cerebral Palsy
National Office and Professional Services Program Dept.
66 East 34th Street
New York, New York 10016
(212) 889-6655

G.65 Volunteers for the Visually Handicapped
4405 East-West Highway, Suite 109
Bethesda, Maryland 20014
(202) 652-4347

Information on all types of aids for the blind and visually handicapped.